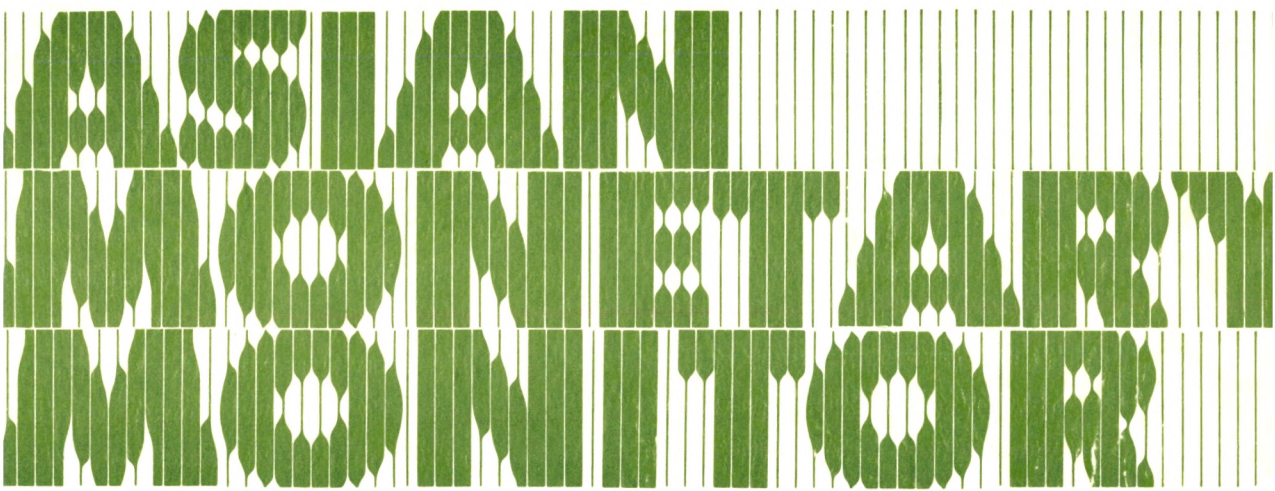




CONTENTS

	Page
HONG KONG'S MONETARY SYSTEM:	
Introduction	1
by John Greenwood	
How To Tighten Up The Linked Rate Mechanism	2
by John Greenwood & Daniel Gressel	
A Free Banking Approach To Reforming Hong Kong's Monetary System	14
by George Selgin	
Negative Interest Rates — A Comparison Of The Hong Kong And Swiss Schemes	25
by John Greenwood	
JAPAN:	
Fiscal Policy On An Expansionary Tack	33
by Andrew Callender	
ECONOMIC CAPSULES:	
Malaysia: Commodity Prices Improve, But Loan Demand Remains Weak	44
IPM	
South Korea: Inflation Is Becoming A Worry	46
IPM	
Thailand: Another Year Of Strong Economic Growth	48
IPM	



John G. Greenwood
Publisher
Group Economist
G.T. Management PLC



Tim J. Lee
Editor
Economist
G.T. Management (Asia) Ltd.



Ian P. MacFarlane
Economist
G.T. Management (Asia) Ltd.



Daniel L. Gressel
Economist
G.T. Management (Asia) Ltd.



Sook Yee Li
Statistician



Michael Wong
Graphics



Isabella Ling
Administration

© ASIAN MONETARY MONITOR LTD., HONG KONG 1988

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the editor.

Asian Monetary Monitor is a bimonthly publication specialising in the analysis of economies along the Asian Pacific Rim. Sold by subscription only, price US\$200 p.a. inclusive of air mail delivery to any part of the world. Correspondence and subscriptions should be addressed to the Editor, Asian Monetary Monitor Ltd., GPO Box 12964, Hong Kong.

ASIAN MONETARY MONITOR

January - February, 1988

Vol. 12 No.1

HONG KONG'S MONETARY SYSTEM:

INTRODUCTION

Since its introduction in October 1983 the linked rate system for the HK\$ has been subject to considerable controversy. In the past few months the link has been subjected to both political and financial pressure resulting from the weakness of the US dollar, and associated with that all the arguments for and against a change in the linked rate system have been extensively debated. In this issue of Asian Monetary Monitor we do not cover this well-known debating ground again, but concentrate instead on a detailed examination of the mechanics of the linked rate system itself, and how it could be improved.

The first article "How to Tighten Up the Linked Rate Mechanism" by John G. Greenwood and Daniel L. Gressel focuses on the non-convertibility of banks' clearing balances into cash and vice versa in the Hong Kong banking system under the current exchange rate mechanism. The authors point out that the cash arbitrage would be much tighter and more efficient (i.e. deviations of the free market rate from the official parity would be smaller) if the banks or the public were able to conduct more arbitrage transactions. They propose four ways of improving the cash arbitrage, two of them more satisfactory than the others.

The second article "A Free Banking Approach to Reforming Hong Kong's Monetary System" by G. Selgin takes a more fundamentalist position, arguing that the key to making the link more efficient is neither in enforcing the 100% reserve nor in improving the mechanics of note issue but in ensuring that HK\$ notes are regularly redeemed at the official parity. Selgin argues that a Free Banking approach which would permit all banks to issue their own banknotes would be compatible with an efficient linked rate system and a stable monetary system for Hong Kong.

Finally, the Hong Kong government itself has devised and implemented a framework to scare off those speculators who think the Hong Kong currency might be revalued. The third article by John G. Greenwood therefore examines the government's scheme and compares it with the negative interest rate scheme introduced by Switzerland in the 1970's.

HOW TO TIGHTEN UP THE LINKED RATE MECHANISM

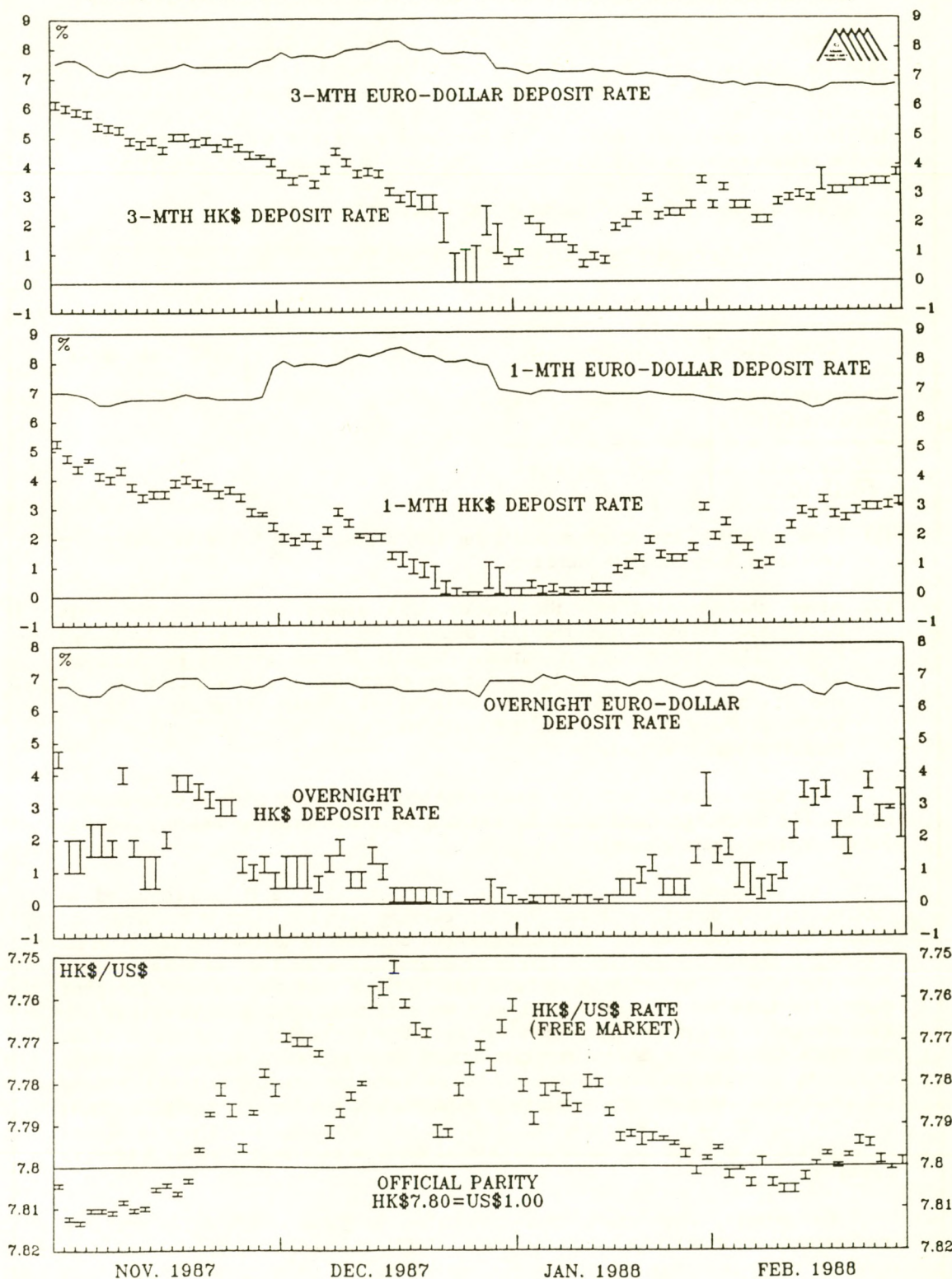
With the recent weakness in the US dollar, the Hong Kong dollar has come under speculative pressure. The charts opposite show that the Hong Kong dollar has strengthened relative to its 7.80 rate and that interest rates have fallen dramatically in Hong Kong relative to those currently in effect in the US market. The speculative inflows to which Hong Kong has been subjected occurred because many speculators think that Hong Kong will not be able to resist US pressure to revalue the HK dollar. To some extent this expectation would be deflated were the exchange rate to remain extremely close to the 7.80 rate. Deviations give hope to the speculator and create uncertainty for the rest of the investing public. The government and the Hong Kong Association of Banks have responded to the speculative capital inflow with a proposal for negative interest rates in Hong Kong. (See page 25.)

In this article, we discuss various ways in which the Hong Kong monetary system could be improved without resort to such ad hoc solutions as negative interest rates. First, we must note that the magnitude of the problem is actually very small. The exchange rate's deviations from the 7.80 rate have typically been of the order of one half percent i.e. about ± 4 cents or $\pm$ HK\$ 0.04. (This is much smaller than the deviations which occurred for major currencies during the days of the Bretton Woods System when the allowable deviations created a band of 1.0% on either side of the parity for US dollars or gold.) In spite of the free market exchange rate varying so little in Hong Kong however, interest rates during this recent episode have been significantly below the US level with overnight interbank rates hovering below the 1% rate on occasion. These rates imply that Hong Kong is receiving an extremely low interest loan from the outside world thanks to the speculators. Except for the fact that this low rate will not be maintained indefinitely and it may therefore lead to mistaken expectations about the future on the part of some private investors, these low interest loans amount to a subsidy for Hong Kong.

THE CAUSE OF THE PROBLEM

The linked rate provides that all licensed banks in Hong Kong have the right to exchange US dollar deposits for Hong Kong dollar banknotes, or the reverse, at the rate of HK\$7.80 per US\$. While the banks as a service to their customers provide for the conversion of HK\$ deposits into HK\$ cash at the rate of 1:1, these banks do not have the ability to go to anyone else in the market and receive the same rate for their HK\$ deposits. Thus, there is a free market rate for HK\$ deposits versus US\$ deposits which differs from the linked rate. Nowadays this service of changing local currency deposits into cash and vice versa at 1:1 is provided by virtually all banks in the world. Only during banking crises in the past - before the advent of central banking in some countries - was convertibility suspended i.e. convertibility in the classical sense of the ability to convert deposits into currency. Normally the bank providing this service can always turn to the central bank to obtain the same 1:1 conversion privilege. This is not true in Hong Kong because there is no central bank.

HONG KONG : CHART 1
 HK\$/US\$ EXCHANGE RATE AND HK\$/US\$ INTEREST RATE DIFFERENTIALS
 (Daily Data, Nov.1987-Feb.1988 ; Bid-Offer Quotes at 10.00am)



THE WORKINGS OF CASH ARBITRAGE UNDER THE PRESENT SYSTEM

Assume the HK\$ is stronger than its linked rate of 7.80, e.g. the interbank rate for US\$ is 7.75. To profit from the difference between the 7.80 rate for banknotes and the 7.75 free market rate, a bank takes HK\$775 in interbank deposits and sells them for US\$100 of deposits in New York. It then remits these US\$100 to a note-issuing bank (or the Exchange Fund if it is a note-issuing bank) and in return receives HK\$780 in cash. The bank has made a profit of HK\$5.

The transactions are detailed in the T-accounts below.

T-Accounts for a Licensed Bank and the Exchange Fund

Licensed Bank		Exchange Fund	
HK\$ Cash $\oplus(2)$	HK\$ Deposits	US\$ Deposits $\oplus(2)$	HK\$ Cash $\oplus(2)$
HK\$ Interbank Deposits $\ominus(1)$			
-----		-----	
US\$ Deposits $\oplus(1) \ominus(2)$	US\$ Liabilities		

- (1) Bank sells HK\$ interbank deposits for US\$ deposits. HK\$ interbank deposits decrease. US\$ deposits increase.
- (2) After this transaction, the bank's US\$ assets are unmatched with liabilities. It exchanges the US\$ deposits for HK\$ cash at the Exchange Fund. (The mechanism is actually through Certificates of Indebtedness which we omit in order to bring out the essentials of the transaction.) At the licensed bank US\$ deposits decline; HK\$ cash increases. At the Exchange Fund, US\$ deposits increase; HK\$ cash (actually Certificates of Indebtedness) increase).

The bank ends up with too much cash relative to its desired cash-deposit ratio. The Exchange Fund gains by exchanging a non-interest bearing liability for an interest-bearing asset.

The problem for the bank is that on its asset side it has replaced an interest earning deposit with non-interest earning cash for which it has little use except to put into a vault. This cash cannot be used to settle overdrafts in its clearing accounts nor can it be forced on customers when they withdraw money from the bank. The arbitraging bank has to hope that the interest foregone during the time for which it has to wait for sufficient cash withdrawals is less than the profit it garners from the arbitrage. For the banking system as a whole the extra cash is only drawn into circulation when economic activity increases enough to increase the public's demand for cash and the banking system's demand for vault cash. In summary, a multiple expansion of the banking system's assets does not happen as quickly as a result of the cash arbitrage incentive as it does in a system where central bank purchase of foreign exchange creates a reserve injection.

Conversely, when there is a speculative outflow which shifts the free market rate for the US\$ to a discount (say, 7.85), the incentive for the banks to conduct cash arbitrage operations is restricted to those banks which have sufficient (i.e. excess) vault cash and are therefore not putting themselves at risk by running down their vault cash reserves.

Because of this lack of convertibility between banknotes and deposits for the banks, the cash arbitrage which is available to the banks (i.e. buying US\$ cheaply in the foreign exchange market and selling them at a higher price to the Exchange Fund for HK\$ banknotes) is unwieldy. In particular, when the HK\$ is strong, cash arbitrage in the amounts necessary to contain the speculative inflows leaves the banks with more than their desired level of cash. This will cause an increase in base money (cash currency) which does not easily lead to a multiple expansion of the money supply. Consequently the banks' cash/deposit ratio would remain above its equilibrium level. To avoid this banks generally do not make much use of the cash arbitrage facility. (See the box on page 4 for an explanation of the cash arbitrage.)

We next discuss four different ways that Hong Kong could change the linked rate mechanism and improve the ability of the market price to stay near 7.80.

A. OPEN THE MECHANISM UP TO EVERYONE.

Currently, the two note-issuing banks have the right to go to the Exchange Fund and in return for US\$ deposits receive Certificates of Indebtedness which authorise them to issue HK\$ currency. The other banks have the right to go to either of the note-issuing banks and have the same facility offered to them at the same rate of 7.80. We saw above that the bankers find the cash arbitrage to be cumbersome since it results in too much currency in their tills relative to their desired levels when the free market rate for the HK\$ is at a premium to the official parity. Conversely it results in a shortage of till currency relative to desired levels when the free market rate for the HK\$ is at a discount to its official parity.

One possibility is to open the arbitrage possibility to everyone. The Exchange Fund would set up an office (e.g. at the G.P.O.) or take space in the various banks. Then, upon presentation of a US\$ cashier's cheque drawn on a reputable bank they would transfer HK\$ cash to the purchaser. Likewise, when the HK\$ is weak they will issue a US\$ cheque in return for the correct amount of HK\$ cash. The prices the public will see will be some bid/ask spread about the 7.80 rate which represents the Exchange Fund's cost of making the transactions. Presumably, this will be smaller than the current band within which the free market rate fluctuates about the fixed parity.

An example may illustrate the process. Suppose the current free market rate is HK\$775/100. A member of the public then goes to the Exchange Fund desk with a cheque for US\$100 and (assuming the Exchange Fund's price shown to the public is 7.79 - 7.81) walks away with HK\$779 in cash. Next he sells HK\$775 from his deposit account in the foreign exchange market for US\$100, thus making a profit of HK\$4 for his trouble. Clearly, the possibility of this arbitrage will shift the spot market price until it is very close to 7.79.

There are two major problems with this system. The first is that it is not clear that with competition in banking the spread on currency trading shown by the banks will be larger than that required by the Exchange Fund in order to cover its costs of operation. That is, it is possible that after the Exchange Fund accurately accounts for its costs of providing this service that it will require a

bid/ask spread which is equal to that which the banks are already providing to the public. In this case, opening the cash arbitrage to the public will not, if correctly charged for, provide the public with anything that they cannot currently receive from the banks. Nor will it bring the market rate closer to the official parity.

The second argument is more powerful. The individual who in the example above just bought HK\$ cash from the Exchange Fund has two choices. He can either continue to hold the cash or he can take the cash to his bank to make a deposit. In the first case the resulting increase in the cash/deposit ratio of the public would assist in absorbing the speculative inflow, whereas under the present arrangements in Hong Kong, banks are very reluctant to allow their cash/deposit ratio to rise and the non-bank public has no opportunity to participate in the cash arbitrage. In the second case the HK\$ cash is placed with a bank, leaving the bank with an increase in HK\$ currency on the asset side and HK\$ deposits on the liability side. This is precisely the result that banks are trying to avoid as seen in the discussion as to why the cash arbitrage is not perfect currently. The fundamental problem remains - the inconvertibility HK\$ cash into HK\$ deposits.

Provided that opening the linked rate facility to everyone results in the speculative inflows being entirely absorbed through increases in the public's cash/deposit ratio, this proposal can work. However there can be no assurance that this would happen. It is entirely possible that those who chose to conduct the cash arbitrage might wish to maintain an unchanged cash/deposit ratio, in which case they would simply transfer the unwanted increase in HK\$ cash back to the banks. The basic problem which remains is that for the system as a whole there is inadequate convertibility between HK\$ cash and HK\$ deposits.

B. ALLOW CASH FOR SETTLEMENT AT THE CLEARING HOUSE

The Hong Kong Association of Banks currently runs a clearing house for the daily processing of HK\$ cheques. The clearing house is located physically inside the Hong Kong Bank's head office building. The clearing house provides this service to its members on a non-profit basis. At the end of every clearing run, the clearing accounts of the "settlement banks", all of which are kept with the Hong Kong Bank, are debited or credited. The clearing house itself has no accounts for its members. Therefore, any overdraft on a clearing account represents a loan from the Hong Kong Bank to the overdrawing member. Currently, this loan has to be arranged in advance.

The first step in this proposal is to change the nature of the clearing house so that the clearing house has various accounts at the different banks in Hong Kong. In turn, the various banks who require clearing services would have a clearing account at the clearing house. They would have the right to settle in either HK\$ deposits (i.e. cheques drawn or debits made against deposit accounts) or HK\$ cash for purposes of settlement at the rate of 1:1. They would also have the right to demand HK\$ cash as opposed to deposits from the clearing house but only if the clearing house had cash on hand. Obviously, if the clearing house did not have cash on hand, the banks could still go to either the Exchange Fund or a note-issuing bank for their cash. Likewise, if the clearing house only had cash on

hand, it could force the banks to accept HK\$ currency instead of a deposit for settlement of deposit drawdowns.

This would allow any bank to engage in cash arbitrage - up to some limit - without disturbing its desired cash/deposit ratios. Within the limits set by the inventory of notes held by the clearing house a bank would be able to achieve its desired ratio of cash to deposits without having to take on any foreign exchange risk nor undergo a cost for converting HK\$ cash into deposits. Any excess cash would simply be sold to the clearing house in return for a HK\$ deposit.

The clearing house would have HK\$ deposits of member banks as a liability, and HK\$ cash and short term deposits scattered throughout the banking system as its assets. Each clearing member would have to arrange for a line of credit with some other bank in order to correct automatically any overdraft that might arise at the clearing house.

Under simplifying assumptions, the net effect from a speculative inflow would be to increase HK\$ cash on the asset side and HK\$ deposits on the liability side at the clearing house. The Exchange Fund would see an increase in its US\$ deposits and HK\$ liabilities (Certificates of Indebtedness), effectively taking an exchange rate position opposite to the speculator. The private sector will not have to be compensated for taking such a risk and thus the spot exchange rate will stay quite close to the linked rate at all times.

The account in the above paragraph is simplified. What actually occurs would be that first a speculator buys HK\$ and deposits them short term. This will lower HK\$ interest rates. This in turn drives up the forward rate for HK\$ by an amount given by the interest rate differential between the US\$ and the HK\$. Only if speculative inflows are large enough to drive HK\$ interest rates to zero will the market be trying, through the price of the forward rate, to pull the spot rate away from 7.80. It is at this time that the discussion in the above paragraph about the net effect of a speculative inflow applies. As long as someone in the system can earn some positive interest on deposits, it is unlikely that they will choose to convert them into cash. A speculative inflow will first drive interest rates toward zero along with a change in the forward rate. Then the ability to convert cash into deposits will keep the spot exchange rate near 7.80.

This system does fix the cash arbitrage. It also is fairer to the other banks in the clearing house who complain that the Hong Kong Bank currently benefits through low cost deposits from the clearing house. The new system would enable the clearing house to make deposits in many banks and receive interest which it could rebate to its users through lower charges or by paying interest on its liabilities. Its only major disadvantage is that it would necessitate a change in the operating procedures of the clearing house. A potential disadvantage would be the credit risk which the clearing house would undertake by providing clearing services for many banks with uncertain credit ratings. This could be alleviated by only opening clearing accounts for those banks who were able to obtain a line of credit from some larger bank. This would eliminate the clearing house's risk from member default.

Some might argue that the clearing house will have in effect become a central bank. We do not think this is true however. The clearing house will not

CASH ARBITRAGE UNDER THE CLEARING HOUSE SYSTEM (PROPOSAL B)

The following discussion concerns the workings of cash arbitrage when the clearing house accepts cash and maintains assets and liabilities independent of the Hong Kong Bank as in Proposal B.

Assume the HK\$ is stronger than the 7.80 rate, say 7.75. Then a bank buys US\$100 paying HK\$775 from its account at the clearing house. The bank then takes the US\$100 to either the Exchange Fund or a note-issuing bank and in return receives HK\$780 in cash in order to maintain a matched foreign currency position. It now has too much cash in its vault and too few HK\$ on deposit at the clearing house. The bank then takes the HK\$ cash to the clearing house in order to increase its deposits. The clearing house is left with non-interest bearing cash, and therefore lowers the interest which it pays out on its deposit liabilities. The T-accounts below detail the transactions.

T-Accounts for Licensed Bank, Clearing House and Exchange Fund

Licensed Bank		Exchange Fund	
HK\$ Cash $\oplus(2)$ $\ominus(3)$	HK\$ Deposits	US\$ Deposits $\oplus(2)$	HK\$ Cash $\oplus(2)$
HK\$ Deposits at CH $\ominus(1)$ $\oplus(3)$			
US\$ Deposits $\oplus(1)$ $\ominus(2)$	US\$ Liabilities		
Clearing House			
HK\$ Cash $\oplus(3)$	HK\$ Deposits of Member Banks $\oplus(3)$		
HK\$ Deposits			

- (1) With the HK\$ strong, a bank sells HK\$ deposits at the clearing house for US\$ deposits. This transaction causes a foreign exchange risk for the bank.
- (2) The bank then sells the US\$ deposits to the Exchange Fund (or a note-issuing bank) for HK\$ cash.
- (3) The bank now has too much HK\$ cash relative to its deposits. It therefore deposits the surplus cash at the clearing house, and receives instead a credit (i.e. a deposit asset) in HK\$. Thus this transaction restores the bank's cash/deposit ratio to its desired level.

The net effect of these transactions is that the Exchange Fund has increased its foreign exchange risk and also its interest earnings. The clearing house has increased its cash in the vault and its interest earning deposits in the banking system are lower than they would have been if the bank had settled with deposit credits rather than with cash. The interest rate which it will be able to pay out on depositors' funds will fall. Since this trade is almost costless for the banks, the market price of HK\$ deposits will stay extremely close to the linked rate.

Speculative outflows will work in reverse with banks asking the clearing house to settle in cash to the extent the banks are short of vault cash. Only after the clearing house has run out of cash will the banks feel constrained in doing cash arbitrage when the HK\$ is weak relative to the link rate.

have the ability to act as the lender of last resort. Nor will it even have the ability to pay out cash on demand unless it has accumulated cash in the past. It will have no control over the money supply as it will be entirely passive, and will not have the ability to control the size of its balance sheet. It will simply be a clearing house operating with more independence from the Hong Kong Bank than at present and with the additional service for its customers of receiving cash for settlement. It will not be taking any exchange rate risk as that will still be borne in the first instance by banks in their role as currency speculators and ultimately by the Exchange Fund.

C. ALLOW BANKS TO SETTLE IN US\$ DEPOSITS WITH THE CLEARING HOUSE

This solution requires the clearing house to set up separate accounts in HK\$ throughout the banking system as in the above proposal. In this case however the clearing house would be empowered to accept US\$ deposits instead of HK\$ for settlement purposes, all conversions being made at the official 7.80 rate.

This would clearly tighten the link. Now a bank would not have to go through even the cash arbitrage in order to match the currency exposure of its assets and liabilities. The only thing it would have to do is pay out any extra US\$ it did not want to the clearing house and in return gain a HK\$ asset. The reverse would only be possible to the extent the clearing house had accumulated US\$ deposits.

The major problem with this solution is that the clearing house would be taking a foreign exchange rate risk. If a revaluation occurred, the clearing house would go bankrupt if it had not accumulated sufficient reserves. This would not be good for the Hong Kong banking system.

D. REPLACE THE HONG KONG DOLLAR WITH THE US DOLLAR

Panama and Liberia currently use the US\$ as their unit of account. In a fundamental sense Hong Kong is already doing so by virtue of the linked rate system. At the time of this writing there is international pressure to revalue the HK\$. Advocates of a revaluation mistakenly think that revaluation would cause a change in Hong Kong's real exchange rate relative to what would happen anyway. But Hong Kong is a small open economy with a fixed exchange rate. Trade (including entrepot business i.e. re-exports) was 188% of GNP in 1986 and capital flows are totally free. If Hong Kong's currency is 'undervalued', the undervaluation will be corrected by an inflation in Hong Kong which is higher than that in the US. This will have exactly the same effect on the real exchange rate and Hong Kong's competitiveness as would a revaluation. Therefore, a revaluation is not necessary in order to correct a possible 'undervaluation'. The market can correct it without damage to the linked rate system.

One way to eliminate all of the energy spent on speculation against or in favour of the Hong Kong dollar is to accept the US argument about the need for a revaluation. First, Hong Kong would redenominate the HK\$ so that it stood at parity with the US\$. Simultaneously, it would declare that all contracts which called for the payment of HK\$ could be settled with the payment of either US\$

or the new HK\$ currency. All outstanding debts would be divided by 7.80 in order to compute the new obligations. This redenomination would not, by itself, eliminate all of the various pressures which the outside world have put on the HK\$. Specifically, it would not ensure the convertibility of currency into deposits nor would it prevent the exchange rate from deviating from parity. It would facilitate the success of the next part of the proposal.

Second, all HK\$ deposits and HK\$ loans at banks would immediately be converted to US\$ deposits and loans, as would all other HK\$ denominated contracts. Therefore, when a person wrote a cheque he would be writing a US\$ cheque. HK\$ deposits would no longer exist. The clearing house would still clear cheques drawn on Hong Kong banks for deposit in Hong Kong. It is likely however that local banks might find it somewhat more advantageous than previously to have correspondent relationships with banks who are either well established in the US or at least have a branch there. These relationships could substitute for the ones the smaller banks feel compelled to have with the two note-issuing banks at present. Thus, competition in banking would be enhanced. A favorable result of this competition would be the elimination of the Hong Kong banking cartel which keeps HK\$ depositors with deposits under HK\$ 100,000 and under 3 months maturity from receiving market rates of interest. The cartel would be broken by the ability of local depositors to make US\$ deposits costlessly with banks outside the cartel.

The present Hong Kong currency would be replaced by a new HK\$ which would now have written "(name of note-issuing bank) Promises to Pay the Bearer on Demand at Its Office Here the Sum of (face value of dollars) US Dollars". The right to issue bank notes with this promise would be handled by the same scheme as at present. That is, a note-issuing bank could only issue one of these notes upon the purchase of a Certificate of Indebtedness from the Exchange Fund.

Local banks would instruct their cashiers to accept these new HK\$ notes for all transactions and receive but not pay out US\$ currency. All of the local automatic teller machines would issue the new HK\$ notes exclusively. The note-issuing banks would also be obliged to redeem at parity HK\$ notes from the other banks who found they had an excess of HK\$ notes.

To some extent these procedures to increase holding of HK\$ cash would alleviate the only economic cost to the changeover, the lost seignorage. Currently, the Exchange Fund issues non-interest-bearing Certificates of Indebtedness to the note-issuing banks in return for interest bearing US\$ deposits. The note-issuing banks in turn issue HK\$ banknotes up to the full face value of the Certificate of Indebtedness that they hold. The revenue earned by the Exchange Fund would be lost if the HK\$ were not replaced with a new banknote (i.e. if Hong Kong chose to use the US\$ as its currency rather than a new HK\$). We are not certain how the demand for new banknotes would compare to the old. Clearly, both HK\$ and US\$ notes would circulate in Hong Kong and both would be acceptable to merchants who were dealing with tourists. That is not any different than the current system where merchants are willing to take US\$ for purchases. On balance, this would tend to reduce the amount of HK\$ banknotes in circulation. However, the new HK\$ notes might be more attractive because they are costless to convert into US\$. Currently, a

significant portion of the HK\$ note issue is circulating in China. For those transactions, guaranteed parity with the US\$ may make the HK\$ more attractive to hold than it currently is.

Another advantage is that Hong Kong would not have to create its own capital market. It would have immediate access to the largest and most efficient capital market in the world. This would help in the pricing and issuing of securities. Maturities in the Hong Kong capital markets are not very long, nor are the swap mechanisms and hedging facilities nearly as complete as those in the US. Hong Kong would gain immediate use from the US futures markets for hedging different currency and interest rate exposures.

This reform should immediately eliminate any pressure from the US to revalue. Hong Kong would have to accept the inflation rate of the US without any mechanism to change Hong Kong's desired inflation rate. Hong Kong would also import US interest rates which are, at the time of this writing, higher than those in Hong Kong. In short, adoption of this proposal would integrate Hong Kong even more than it already is into the world capital markets.

CONCLUSION

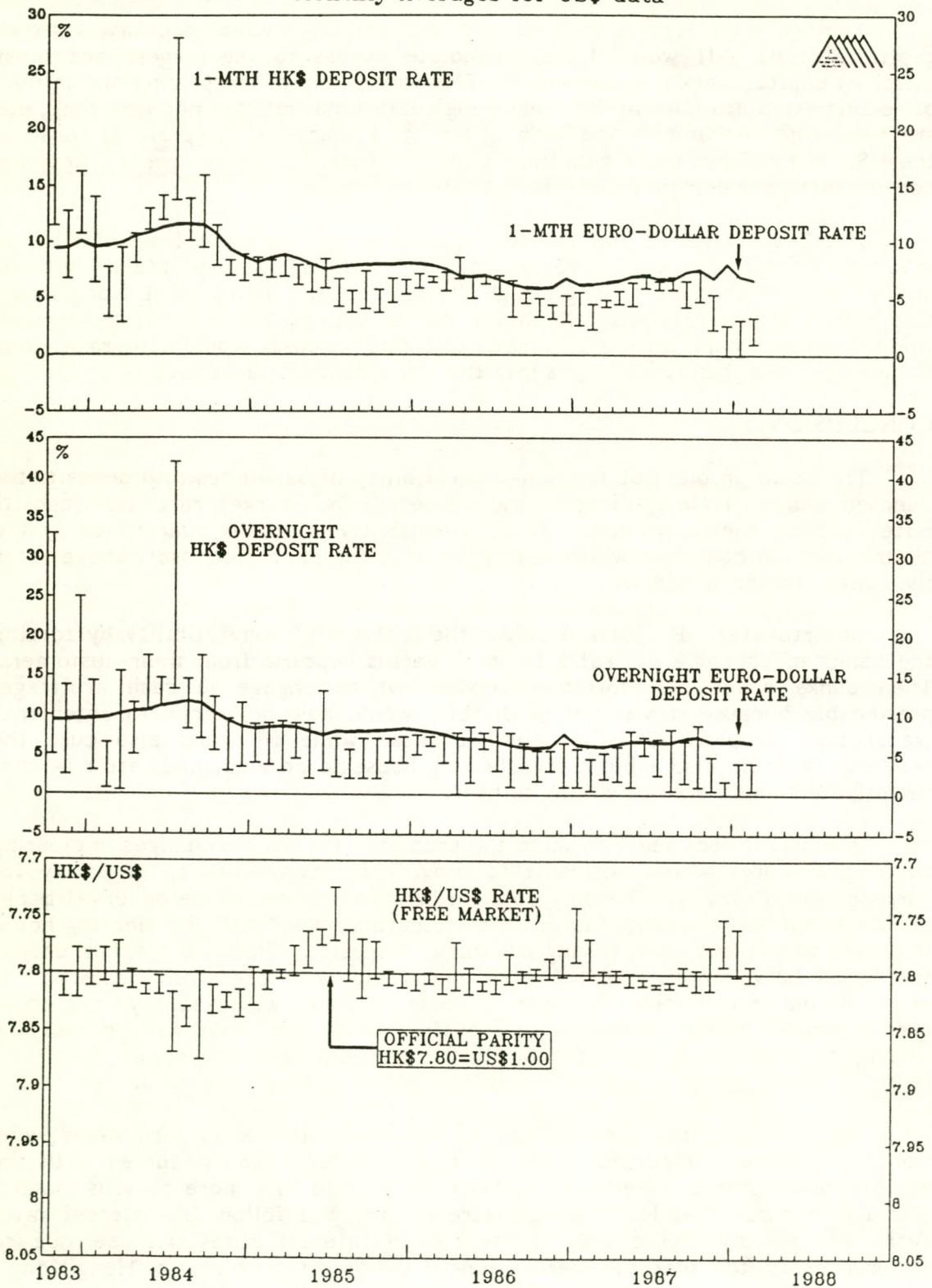
The basic problem of the non-convertibility of banknotes into deposits for licensed banks in Hong Kong is the cause of the market rate for deposits differing from the linked rate. This convertibility is usually guaranteed by the central bank in countries which have one. All four of the proposals above solve the convertibility problem.

Unfortunately, Proposal A solves the problem of convertibility by forcing the banks to accept a 1:1 ratio for cash versus deposits from their customers. Then banks which had formerly chosen not to engage in cash arbitrage, presumably because it was not profitable, would now be forced to enter that transaction. Proposal C is deficient because while it would also cure the problem, it would also subject the clearing house to an exchange rate risk that the private banks were not willing to bear.

Proposal B does seem to solve the problem. It requires changes in clearing house procedures which enable it to provide for convertibility at parity for currency and deposits. The only possible hitch which may arise occurs if banks decide to run their balances down at the clearing house until the clearing house is forced to pay out cash, having run out of deposits. This is a problem only if the banks have no use for the cash and would have preferred deposits. In practice, major reductions in clearing house balances will probably only occur during periods of speculative capital outflow when the banks will probably be willing to take HK\$ cash to the Exchange Fund for conversion into US\$ deposits. Thus, we do not think that this objection is very important.

Proposal D is the most radical of the four. It merely formalizes Hong Kong's abdication of control over its money supply which occurred with the establishment of the linked rate in 1983. It does so in a more obvious manner and also ensures that Hong Kong interest rates will follow US interest rates extremely closely. The only difference in interest rates will be due to differences in the market's perception of the creditworthiness of Hong Kong's

HONG KONG : CHART 2
 HK\$/US\$ EXCHANGE RATE AND INTEREST DIFFERENTIALS
 OCTOBER 1983-FEBRUARY 1988 ; Monthly Ranges for HK\$ data ;
 Monthly Averages for US\$ data



banks and the assets of those banks. In addition, Hong Kong would gain greater access to the US capital markets than it already has.

Given the problems which have arisen with the current arbitrage mechanisms and the costs of imposing ad hoc solutions such as negative interest rates, we urge a further investigation of these two alternatives.

A FREE BANKING APPROACH TO REFORMING HONG KONG'S MONETARY SYSTEM

by George A. Selgin

Assistant Professor of Economics, George Mason University

Introduction

Since its near collapse in September 1983 the Hong Kong dollar has been reestablished on a firm foundation through its link with the US dollar. Under the linked rate system HK\$ banknotes held by the licensed banks are convertible at a fixed official parity of HK\$7.80 per US dollar into US dollars, but unlike convertible currencies of the past, this convertibility at a fixed rate is not extended to the non-bank public who must buy and sell Hong Kong dollars on the free market at a rate which may differ from the official parity. Although the "linked-rate" system has successfully stabilised the purchasing power of Hong Kong's currency, it suffers from several important shortcomings. These stem not from the link with the US dollar, but from the institutional arrangements for currency supply, which in essence are unchanged from their original design in 1935. The shortcomings include:

- (1) A "top-heavy" banking system, which places an inordinate measure of public responsibility in the hands of a single, private bank: the Hongkong and Shanghai Banking Corporation. The reliance of the system on the altruistic conduct of the Hongkong Bank can be traced to its right to issue notes (which it shares with the Standard Chartered Bank) and to its management of the clearing house. These special responsibilities of the Hongkong Bank lead to its being called upon in times of banking difficulties to assist its troubled rivals by serving as a "lender of last resort". On several occasions in the past the Hongkong Bank has taken advantage of its special responsibilities to take over, merge with, or otherwise decide the fate of illiquid banks.
- (2) A somewhat loose link between the market value of the Hong Kong dollar and its official parity of HK\$7.80 per US dollar which prompts the Exchange Fund to intervene in the foreign exchange market from time to time even though private sector arbitrage should be sufficient to keep the free market rate close to the official parity (see Asian Monetary Monitor Vol. 8 No. 6 pp. 4-5 Nov.-Dec. 1984, "Partial vs. Full Convertibility"). The reason for the looseness of the link is that sales and purchases of Hong Kong currency against US dollars at the official rate involve high transactions costs and substantial opportunity costs. The "spread" between the market rate and the official rate may therefore need to be fairly large before arbitrage occurs. As a consequence, the infrequency of arbitrage may result in extended periods of monetary disequilibrium, which in turn may delay adjustments in the real economy.
- (3) The requirement of 100 percent US dollar collateral for note issues. Though this does not really involve the maintenance of 100 percent US dollar reserves in practice, it may cause the supply of currency to be inelastic, by tying the maximum issue to the overall balance of payments. This could lead to short-run deflation, though the problem is largely hypothetical at

present. (See box on p. 19.)

- (4) A cumbersome and inefficient system of currency supply. Under the linked rate system today all licensed banks can obtain HK\$ banknotes by payment of US\$ at the official rate directly or indirectly to the Exchange Fund. In the case of the two note issuing banks, payments in US\$ are made direct to the account of the Exchange Fund in New York. In the case of all other licensed banks payment may first be made in US\$ to the account of the Hongkong Bank or Chartered Bank, which in turn will make payment to the Exchange Fund. (The only exception is for purchases (and sales) of notes amounting to less than HK\$10,000 in aggregate.) For redemptions of note issues the process works exactly in reverse, with the two note-issuing banks dealing direct with the Exchange Fund, but all other banks having payment routed through the two note issuing banks which act as agents for the Exchange Fund. This is the mechanism that was set up in October 1983 to ensure that all banks had equal access to the official 7.80 parity.

Given the fact that there are only two note-issuing banks, and the fact that the Exchange Fund does not issue bank notes, there is no alternative way to operate the system. However, the requirement that banknotes are only obtainable by banks against payment of US\$ does lead to a serious inefficiency: the Hong Kong dollar clearing balances of settlement Banks at the clearing house or of Sub-Settlement Banks are themselves not convertible into banknotes. Instead banks must acquire cash through a separate transaction purchasing it with US dollars at the official exchange rate. This differs from most other banking systems, where deposits at the currency-issuing authority, including clearing deposits held by banks, are freely convertible into currency.

The Hong Kong arrangement forces banks needlessly to purchase US dollars to acquire new notes, even though they may have substantial HK\$ clearing balances. Such transactions are entirely wasteful. Their only purpose is to uphold the fiction of 100 percent US dollar backing for Hong Kong currency whereas 100 percent reserve backing of notes is not at all necessary to preserve the linked rate system. All that is essential is that notes (and possibly deposit credits as well) be redeemable on demand in US dollars at a fixed rate. The more wide-ranging the opportunities for redemption of Hong Kong dollars at the official rate, the "tighter" will be the link with the US dollar.

In the design of the linked rate system the right of access by all banks to the 7.80 official parity was correct in principle, but the denial of convertibility into cash of banks' HK\$ clearing balances seriously weakened the incentives to conduct cash arbitrage transactions. For the non-bank public the possibility of doing cash arbitrage operations was prevented by only giving licensed banks access to the official parity; for the licensed banks the incentives to cash arbitrage were weakened by the imposition of unnecessary transaction costs.

Problems (2) - (4) might conceivably be solved by assigning clearing house and note-issue responsibilities directly to the Exchange Fund, while explicitly abandoning any pretence of 100 percent reserve backing for the bank notes. This would, in effect, transform the Exchange Fund into a fully-fledged central bank with (limited) discretionary powers (see Asian Monetary Monitor Vol. 7 No. 5, Sept.-Oct. 1983, "How to Rescue the HK\$: Three Practical Proposals", especially pp. 19-25 Schemes 1 and 2A). The danger of such a reform is that it poses a grave threat to the integrity of the linked-rate system. Rather than addressing problem (1) by helping to tighten the US dollar link, a central bank would be tempted to use its discretionary powers to manipulate the supply of Hong Kong dollars in an arbitrary or capricious manner, to meet temporary, domestic objectives (e.g. lower interest rates), rather than restoring balance of payments equilibrium. This could lead to its making discrete changes in the official US dollar rate of exchange, or to complete abandonment of the linked-rate system in favour of a return to a floating Hong Kong dollar. Experience elsewhere in the world, including those countries which previously had Currency-Board systems similar to Hong Kong's present linked-rate system, suggests that centralising or nationalising the clearing house and the currency issue in this way would soon precipitate a shift to a discretionary monetary system. It is therefore desirable to seek some alternative to a central bank for resolving the shortcomings of the present system.

Fortunately an alternative does exist which is free from the dangers posed by a central bank. Instead of calling for greater centralisation of the currency system, this alternative calls for greater decentralisation. Its main components are (1) a private clearing house, independent of any single bank; and (2) more liberal arrangements for note-issue, with note-issue privileges extended to all licensed banks, and with provisions for note issues unencumbered by any statutory US dollar collateral requirements, but subject to strict US dollar convertibility at the official rate.

The Reform

The proposed reform would not require any substantial, positive legislation. It would be based almost entirely upon mere relaxation of existing laws. Some aspects of it are already being looked into by the banking community. The following steps are required:

- (1) An independent clearing house which itself is not a bank should be established by altering the existing clearing house rules, as enacted by the Governing Committee of the Hong Kong Association of Banks. The present rules require all members of the HKAB (i.e. all licensed banks) to use clearing facilities provided by the Hongkong Bank. This requirement should be rescinded. This could be accomplished through a vote by the Governing Committee. Although such a change is likely to be opposed by the Hongkong Bank, other Committee members, including the Bank of China and the Chartered Bank, may look favourably upon it. Hence this part of the proposed reform could occur on its own, without requiring any special legislative action. Other banks should also prefer a clearing house independent of the Hongkong Bank, since they stand to gain by earning interest on any credit balances at the clearing house, and from a more even-handed treatment of members suffering temporary bouts of illiquidity.

- (2) All licensed banks should be given authority to issue bearer notes, free from any obligation to deposit US dollars with the Exchange Fund, but subject to the requirement that the notes be convertible on demand, by other banks or by members of the public, into US dollars at the official rate. These notes, which may be considered an addition to the already existing (but very small) fiduciary issue of the authorised banks, should bear a written promise to pay on their face, e.g. "The _____ Bank promises to pay the bearer on demand US dollars at the rate of US\$1 per HK\$7.8." Banks (and not the government) should bear the costs of issuing these notes: because fractional note-issue (i.e. the issue of notes against less than 100% collateral) would be a source of profit to responsible banks, there would be no reason for the government to subsidise it in any way. Fractionally-backed notes should be treated as net liabilities of their issuers, to be routinely exchanged and redeemed (along with cheques and HK\$ travellers' cheques) at the clearing house. They should not be given legal tender status; the legal-tender status of presently-issued notes should also be withdrawn. This could be done without affecting their acceptability for the purpose of in payments to the Hong Kong government.

Although all licensed banks would be permitted to issue their own banknotes under the reformed system, it is likely that only a limited number would in fact issue their own notes (see below). As a result, in the reformed system banks would need to settle not only interbank clearing balances at the clearing house, but also notes returned by other banks.

- (3) Banks should be allowed to request settlement of note- and cheque-clearing balances in US dollars at the official rate. This is consistent with existing arrangements, in so far as banks are now permitted by the clearing house rules to request direct (bilateral) settlement of their balances in cash (i.e. notes of the Hongkong and Chartered Banks backed by US dollar deposits with the Exchange Fund) where cash itself is redeemable in US dollars at the official rate.
- (4) The Exchange Fund should be prepared to retire the Certificates of Indebtedness corresponding to the "100 percent backed" notes issued by the Hongkong and Chartered banks against US dollars at the official rate. Again, this would not require specific legislation, yet the redemptions would be likely to occur because both the Hongkong and Shanghai Bank and the Standard Chartered Bank would find it more profitable to have a relatively smaller outstanding note issue consisting of fractionally-backed notes only and to use the real resources currently held on their behalf by the Exchange Fund to enhance their business.

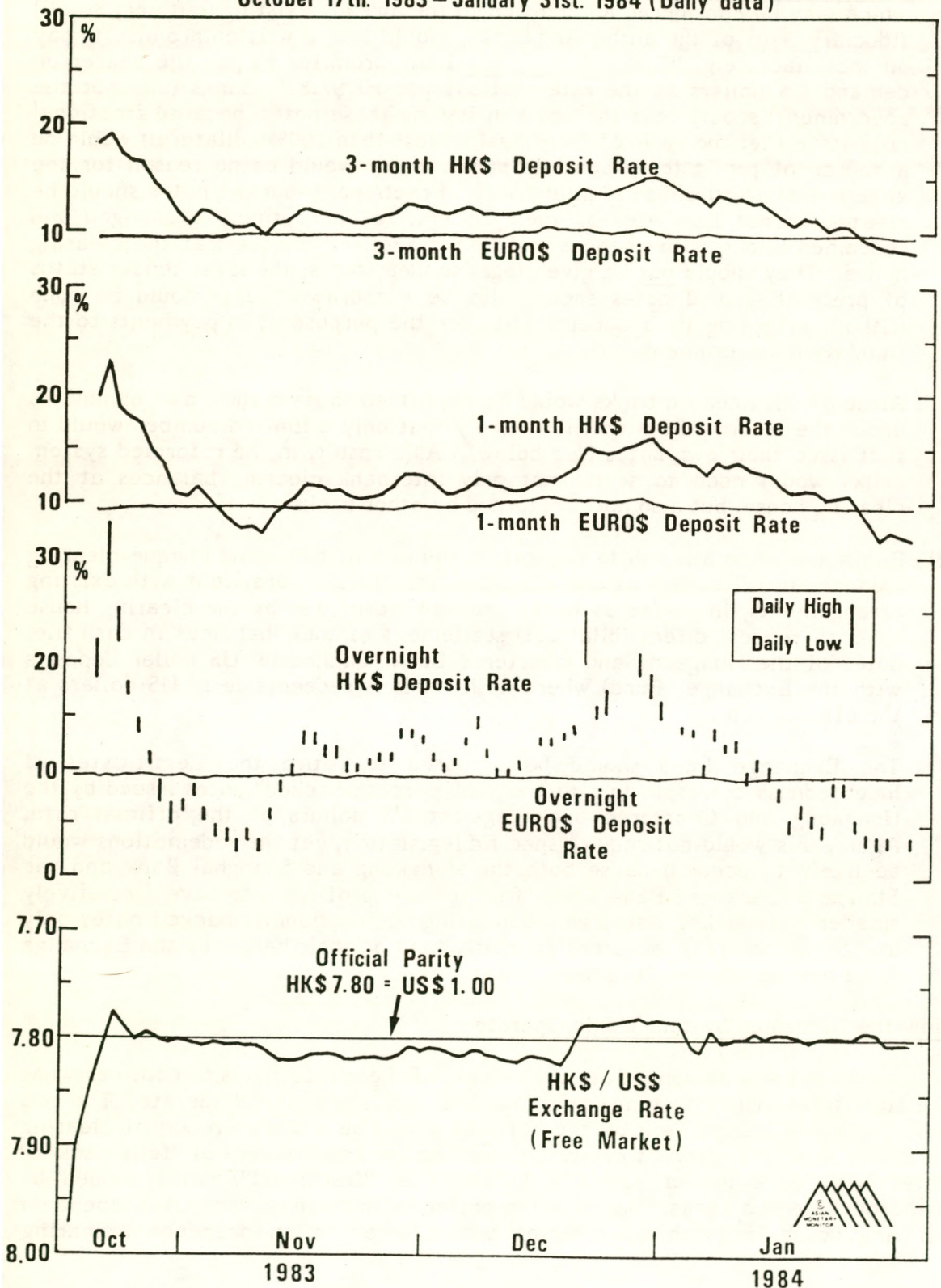
How the Reformed System Would Operate.

The best way to appreciate the effects of these reforms is to consider what the fully transformed system would look like and how it would operate. The two major changes inaugurated by the reforms would be a transference of clearing facilities to an independent clearing house and the replacement of "fully backed" notes with unbacked or partially backed (i.e. "fractional") notes, issued by numerous licensed banks. Banks would prefer to do business with an independent clearing house (or with sub-clearing banks linked to an independent clearing

HONG KONG : CHART 1

HK\$ / US\$ EXCHANGE RATE AND INTEREST RATE DIFFERENTIALS

October 17th. 1983 – January 31st. 1984 (Daily data)



POTENTIAL FOR DEFLATION UNDER THE PRESENT CURRENCY SYSTEM

Suppose, for example, that the reserve-deposit multiplier has a value of 10, and that a favourable balance of payments increases Hong Kong's reserves of US dollar assets by the equivalent of HK\$10 million per year. Then total money growth should be HK\$100 million per year, with the proportion of this growth represented by currency determined entirely by the preferences of the public. Thus, if the public's desired cash currency to money supply (C/M-1) ratio is 1/5, currency should grow by HK\$20 million per year, and deposits should grow by HK\$80 million per year, notwithstanding the fact that US dollar reserves only increase by HK\$10 million annually. Under the linked rate system, however, this would be impossible in the short-run: currency could not grow by more than HK\$10 million per year. Therefore, to achieve the public's desired C/M-1 ratio of 1/5, total money growth would be limited in the short-run to HK\$50 million per year (i.e. deposits grow by only HK\$40 million per year). This is one-half of the optimal, non-deflationary monetary growth rate. The difference represents the deflationary effect of the 100 percent reserve requirement, which would force the Hong Kong price level temporarily below the US price level. In the long-run this would lead to an increase in exports and to an increase in Hong Kong's US dollar reserves, currency supply, and price level. In other words, deflation is avoided in the long-run, but at the cost of a sacrifice of potential, real gains from trade.

This deflationary effect may also be observed when there are cyclical changes in the relative demand for currency (see AMM Vol. 8 No. 1, Jan.-Feb. 1984, "The Internal Drain), or whenever the secular growth of (nominal) currency demand (for some given price-level) outstrips the overall balance of payments surplus. (If there is a negative balance of payments, the nominal demand for currency has to fall by a like amount if deflation is to be avoided.)

One such deflationary episode occurred in December 1983 - January 1984 soon after the linked rate system was established (see Chart opposite) and resulted from an "internal currency drain" rather than an "external drain", i.e. a domestic conversion of deposits to currency rather than an outflow of funds abroad. As the Christmas and New Year holiday period approached, Hong Kong depositors drew down deposits and converted them to cash currency. Outstanding cash in the system rose by over 7%. The volume of loanable funds fell, but with loan demand unchanged, interest rates began to rise. As interest rates rose, so did the exchange rate of the HK dollar, which moved to a premium relative to the 7.80 parity. With the exchange rate at a premium it made sense to banks (a) to sell HK dollars for US dollars in the market at 7.78 and sell the US dollars to the Exchange Fund for notes at 7.80, and (b) as long as HK\$ interest rates exceeded US\$ rates it paid to borrow US dollars, convert to HK dollars, and lend at short term in Hong Kong. After some two weeks the squeeze on internal rates came to an end. In other words, the internal drain was solved by the automatic incentives triggered by the linked rate itself.

As this was the first episode of its kind under the new exchange rate system it did not take the banks long to understand the mechanism. In subsequent years banks have prepared ample funding ahead of the anticipated Christmas or Chinese New Year squeeze, and as a result there has been no such domestically-driven upsurge in rates since 1983-84.

house) first because as co-owners of the clearing house they would benefit from interest on their net clearing house balances (which would be equitably distributed among member banks rather than held at present at HSBC with no interest), and second because of its greater likelihood of assisting them in an even-handed fashion in times of strain. For example, the clearing house could help to muster the resources of numerous other banks to help a temporarily illiquid rival, without relying on the assistance of any one bank. Cooperating banks would be rewarded by interest earnings from their emergency loans. Not being a bank itself, the clearing house would have a clear interest in its members' survival (Problem 1).

Fractional note issues would also be certain to replace fully-backed issues, because of the greater profits which the present note-issuing banks could derive from not having to hold non-interest bearing Certificates of Indebtedness as collateral for their issues, and because the present non-issuing banks could profit by using their own notes as till money (instead of notes issued by rival banks) and by using note-issues as an alternative means for expanding their balance-sheets. The same incentives that would promote the substitution of fractional notes for fully backed notes would also lead banks actively to redeem notes issued by rival banks. This increases the scope for their own issues while simultaneously reducing their exposure to risk (due to other banks' potential failure or to their engaging in a "note raid" after accumulating large quantities of their rival's issues). The active exchange and redemption of notes into US dollars would create a very "tight" link between their market price in US dollars and the official parity (Problem 2). It would also ensure the par acceptance of notes issued by diverse banks. This means that, although there may be numerous brands of bank notes in circulation, all would be part of a uniform Hong Kong dollar currency.

If banks are required to redeem their notes in US dollars at the official rate of US\$1 to HK\$7.80, it follows that they will regard US dollars as their ultimate reserve asset. This will lead to their requesting payment of clearing balances in US dollars or in some close substitute, such as US government securities. The consequence of this will be a non-zero prudentially-determined demand for US dollar reserves by the banking system, which would serve to limit the creation of HK dollars in a manner broadly similar to, but less restrictive and cumbersome than, the present arrangements for converting HK\$ bank notes into US dollars at a fixed rate. (Just as non-issuing banks today hold US\$ settlement accounts with the note-issuing banks for acquiring and depositing bank notes, banks in the reformed system would hold such accounts at an independent clearing house for regular clearing purposes. This would reflect the change from partial to full convertibility of HK\$ into US\$ at the official rate.) Banks could most efficiently employ their US dollar reserves by depositing them with the clearing house in exchange for credits to their HK\$ clearing balances. The clearing house could then invest the proceeds in interest-bearing securities, much as the Exchange Fund currently invests US dollars received from the Hongkong and Chartered Banks. An important difference, however, is that the independent clearing house could be induced by its member banks to pay interest on their Hong Kong dollar clearing balances, equal to its interest revenues minus its operating costs. The net result would be a transfer of the seignorage currently earned by the Exchange Fund back to the licensed banks and hence through competition to the Hong Kong people as a whole.

Just as individual banks in Hong Kong today are forced by the clearing system to limit their loans (and associated deposit-creation), banks in the reformed system would be forced by adverse clearings to limit their note issues to a level consistent with the public's need for currency balances. An excessive note issue by any bank would cause its excess issues to be spent and (ultimately) deposited, mainly at other banks. The notes would then be returned through the clearing house, adding to the clearing debits of their issuer, and forcing it to contract its loans to restore its reserve position (unless, of course, it started out with excess reserves to begin with). A single bank acting alone (and lacking excess reserves) could only afford to increase its note issues if the public decided to hold greater quantities of that bank's notes in their cash balances. Likewise, expansion by the banking system as a whole could only occur in response to a change in the aggregate demand for bank money (notes and deposits), through the influence of changes in demand on the volume of clearings (or the "turnover" of bank money) and hence on the value of individual banks' optimal reserve-liability ratios (i.e. their optimal ratio of clearing balances to deposit liabilities).

In this reformed system the nominal supply of currency is determined entirely by the wants of the public (given an unchanging supply of US dollar reserves), and there is no difficulty in accommodating changes in the public's desired cash-to-M1 ratio. This is especially important during holidays, such as at Christmas time and during the Chinese New Year, when there is usually a substantial increase in the public's desired C/M-1 ratio. The new system would also relieve pressure during financial crises which involves large-scale withdrawals of cash, and consequent sharp increases in the public's C/M-1 ratio, such as the 1967 panic. Since deposits and fractionally-issued notes are backed by the same assets (with no special collateral requirements imposed on either kind of liability) even a wholesale conversion of deposits into bank notes and vice versa could be achieved with no necessary effect on the supply of HK\$ loanable funds, Hong Kong interest rates, or the total value of the nominal supply of HK\$. By preventing an unwarranted increase in Hong Kong interest rates, the new arrangement would also prevent the Hong Kong currency from selling at a (temporary) premium to the official parity, as it might under the current system. This is still another way in which the reform would help to tighten the link (Problems 2 and 3).

Since in the reformed system any bank can use its own notes to meet its customers' currency needs, the system does not force banks to undertake special transactions with their rivals or with the Exchange Fund for this purpose (Problem 4). Of course, only larger banks, with substantial brand-name reputations, would be likely to succeed in getting their notes accepted; other smaller banks would continue to refrain from issuing their own notes, and would hold notes of other banks as till money. Nonetheless the presence of several banks (say, half a dozen or more) issuing notes on a competitive basis would be sufficient to guarantee proper behaviour of the currency supply.

FRACTIONAL NOTE ISSUE AND THE STABILITY OF THE MONEY SUPPLY

1. Peel's Act and 100% Reserves

An important hurdle which this proposed reform must overcome is the widespread belief that plural, fractional note issues would lead to monetary instability or to inflation. This belief can be traced back to the thinking of the English Currency School as embodied in the Bank Act of 1844 ("Peel's Act"). The Bank Act placed note issue in England on a 100 percent marginal specie-reserve basis, by requiring the Bank of England to hold full specie cover for all note issues beyond those outstanding at the time of the Act's passage, and by absolutely prohibiting any further issues by other banks. It also helped to reinforce the Bank of England's limited monopoly of note issue. This Act served as a model for other 100 percent note reserve systems elsewhere in the world, including Hong Kong's.

Members of the Currency School believed that a nation's money supply should be rigidly linked to its trade balance. They also believed that banks would overissue currency if not constrained by regulations. These beliefs involve several crucial errors. First, linking a nation's currency supply (bank notes) rigidly to its balance of payments is not the same as linking its total money supply (notes and deposits) to that balance. Peel's Act overlooked the role of deposits as a component of the money supply. Second, there is no economic justification for enforcing a rigid link between a country's stock of base money (specie in 19th century England; US dollars held by the Exchange Fund - corresponding to Certificates of Indebtedness which in turn match the banknotes issued - in present-day Hong Kong) and its total money supply. The relation between these two magnitudes - the "reserve multiplier" - should be free to adjust in response to changes in the public's demand for bank money relative to its (and the banking system's) requirements for the reserve medium. For example, a growing, open economy with a rapidly developing banking system, operating on a gold standard, will tend to make do with an ever-diminishing supply of gold reserves even as the nominal value of (and demand for) its banks' liabilities increases. Currency School doctrines do not allow for such cost-saving substitutions of bank money for base-money. Third, there is no justification for the view that competing note-issuers will overexpand or that monopolised note issue is less expansionary than plural issue. On the contrary: competing, plural issuers put pressure on one another not to overissue by constantly demanding redemption of excess issues through the clearinghouse, whereas a privileged monopoly bank of issue can expand its notes without facing immediate adverse clearings as a result. Had members of the Currency School realised this, they would have been more critical of the Bank of England's privileged status, instead of helping to reinforce that privileged status.

In England Peel's Act led to frequent overissue by the Bank of England, followed by periodic currency crises, so that the Act eventually had to be repealed after being frequently suspended. Yet similar legislation was involved in all the sterling exchange-standard systems, and is still involved in Hong Kong's dollar exchange-standard. Nevertheless the present 100 percent US dollar reserve requirement is not at all essential to the preservation of the linked rate system. The real basis for the link is not 100 percent US dollar reserves (or the requirement of full payment in US dollars to purchase notes, which is really what

is involved). The real basis is the convertibility on demand of Hong Kong dollar notes into US dollars in unlimited quantities at a fixed rate of exchange. The proposed reform not only does not interfere with the link, but actually strengthens it by increasing the opportunities for convertibility.

2. Fractional Note Issue in Hong Kong

Though note issue in Hong Kong was placed on a 100 percent (marginal) reserve basis just before the turn of the century, fractional-issue had been the norm prior to that time. Many local banks engaged in free note issue before 1895, though only those incorporated by Royal Charter or under Colonial Regulations could have their notes accepted by the Treasury. In 1895 the notes of five banks were publicly receivable. These were redeemable in silver, and were issued on a fractional specie reserve equal to at least one third of the total circulation.

Bank notes did not become legal tender until the Bank Notes Ordinance of 1895. Nevertheless they had long been preferred to silver coin, and occasionally commanded a premium over it. This was usually a sign that bank notes were being undersupplied. Predictably, following the passage of the Bank Notes Ordinance of 1895 the shortage of bank notes became a chronic problem. The Ordinance prohibited the issue of notes in Hong Kong without the sanction of the Secretary of State (as signified through the Governor of Hong Kong). Thus note issues were confined to the Hongkong and Chartered banks (the Mercantile Bank was added to the list in 1911), and these banks were prohibited by their charters from issuing any notes in excess of their paid in capital. Other banks, including the recently opened National Bank of China, had to retire their issues and therefore could no longer help to fulfil the currency needs of the public.

Year by year currency shortages became increasingly serious; by the end of the 1920s the premium on bank notes had risen as high as 20 percent! Though the government, after discovering that the Hongkong Bank had exceeded its maximum, legal issue by \$10.8 million in 1898, decided to allow it and the Chartered Bank to undertake "excess issues" covered by 100 percent reserves, this did little to alleviate the currency shortage. The banks did not find it profitable to import additional silver to satisfy the growing market demand for their notes. The new law also placed stricter requirements on the banks' "authorised" (fractionally-based) issues, limiting them to a fixed total of \$30 million and requiring two-thirds backing in silver.

Thus the government, by preventing fiduciary note-issues by private banks (and by severely limiting entry into the note-issue business), created a serious shortage of currency, and forced an excessive reliance by the public on silver coin. There seems to have been no justification for this interference, except the desire of the authorities to favour British over non-British banks, and the related but mistaken opinion that English banking legislation could not be improved upon and that it should therefore be copied by all other governments.

Conclusion

These reforms do not attempt to address all of the problems of the Hong Kong banking system. In particular, they leave untouched the current interest rate agreement and the three-tiered banking system. They also do not provide for the growth of money market funds, which should be part of any healthy banking system. A really complete reform should do away with all existing barriers to competition among financial institutions in Hong Kong since these barriers constitute an important source of monetary instability. Nevertheless the reforms proposed here would strengthen the linked rate system in several crucial respects while enhancing the banks' ability to compete on an equal footing.

To summarise, the current linked-rate system combines an anachronistic arrangement for currency supply with provisions for partial convertibility into US\$ at a fixed rate. The proposed reform would eliminate the cumbersome arrangements for note issue, while making HK\$ fully convertible into US\$, by allowing all banks to issue fractionally backed HK\$ bearer notes redeemable in US\$. It would also rationalise the clearing system, by establishing an independent clearing house where note and cheque clearings would be settled by transfers of US\$ clearing balances.

NEGATIVE INTEREST RATES — A COMPARISON OF THE HONG KONG AND SWISS SCHEMES

1. Negative Interest Rates - The Hong Kong Scheme.

Concerned at the continued speculation on an upward revaluation of the Hong Kong dollar, the Hong Kong authorities have devised and announced a scheme to impose charges on certain credit balances at banks in Hong Kong. As announced so far the scheme has two parts :

- (i) a charge payable to the Exchange Fund on incremental balances (relative to a base date) of licensed banks on credit balances at the Clearing House, and
- (ii) a charge on customers' credit balances at licensed banks in Hong Kong dollars.

The first part of the scheme was announced on Saturday, December 19, 1987 by the Committee of the Hong Kong Association of Banks. A new rule known as the "Specified Rate Rule" was introduced "as to the conduct of the business of banking by the authority vested in the Laws of Hong Kong, the Hong Kong Association of Banks Ordinance Chapter 364 Part IV Para 12." The press release went on to give the text of the new "specified rate rule" as follows :

"1. In these supplementary rules expressions and terms which are defined in the rules relating to the Clearing House (dated 29th March 1982) as amended shall have the same meaning when used in these supplementary rules.

2. (a) Each settlement bank (including the management bank in its function as a settlement bank for the purposes of this rule) shall promptly on the business day following the completion of settlement for each day upon which the specified rate is other than zero deliver to the Management Bank a reconciliation statement showing how its balance with the Management Bank is comprised as between (1) balances with that Settlement Bank of each member bank clearing through it and (2) the balance attributable to its own business, provided that in the case of the Management Bank the reconciliation statement shall only show the balances of member banks clearing through it. At the same time each settlement bank shall debit to the account of each such member bank an amount of interest calculated at the rate set out in rule 4 below in respect of such member bank's balance with it and deliver such amounts to the Management Bank together (in the case of each Settlement Bank other than the Management Bank) with a similar amount of interest in respect of that part of the balance with the Management Bank (as shown in the reconciliation statement) as is attributable to its own business.

2. (b) If the net clearing balance at the completion of settlement on any day upon which the specified rate is other than zero is less than the net clearing balance on the last preceding day upon which the specified rate was zero, the Management Bank shall be charged interest at the rate set out in rule 4 below

upon the amount of the difference between such net clearing balances.

For the purposes of this rule the net clearing balance shall be the sum of the balances of the settlement banks with the Management Bank and of the member banks which clear through it.

3. The Management Bank shall promptly pay all amounts of interest charged pursuant to these rules to the Financial Secretary as Controller of the Exchange Fund.

4. Interest rates for the purposes of these rules shall be calculated on a daily basis by reference to an annual interest rate ("the specified rate"). This rate and the applicable system of charging as set out below will be determined from time to time by the Committee after consultation with the Financial Secretary.

System A

- (A) On the amount of any credit balance between \$10 million and \$25 million inclusive the specified rate shall apply.
- (B) On the amount of any credit balance above \$25 million and not exceeding \$100 million four times the specified rate shall apply.
- (C) On the amount of any credit balances above \$100 million and not exceeding \$200 million eight times the specified rate shall apply.
- (D) On the amount of any credit balances in excess of \$200 million sixteen times the specified rate shall apply.

System B

On the amount of any credit balances in excess of \$25 million the specified rate shall apply."

Commenting on the new rule adopted by the Hong Kong Association of Banks at their meeting on Saturday, (19th December), which makes provision for the charging of interest on credit balances held overnight at the Clearing House, the Chairman of the Hong Kong Association of Banks, Mr. John MacKenzie, said, "The Hong Kong Association of Banks has introduced this new rule, after consultation with the Financial Secretary, to provide a mechanism for collecting interest on excessive credit balances, and in response to the continued speculation regarding the HK\$/US\$ link rate.

"Government has repeatedly affirmed that the link rate of 7.80 HKD will not be changed and by these categorical assurances has given fair and explicit notice of its intentions.

"Nevertheless speculation continues and is a thorough nuisance to the conduct of non-speculative business, to genuine commercial activity, and has substantially reduced the income of savers, of the man in the street.

"We now have this mechanism in place and in case of need it will be used to eliminate or reduce speculation by charging punitive rates of interest on excessive credit balances. These punitive rates will be charged to the banks but will be passed on by the banks to their customers including overseas banks, financial institutions and corporations. By virtue of paragraphs 2(a) and (b) all banks including the Management Bank will be charged. If the rule were to be activated in present circumstances the specified rate, under System A might well be 5.5% per annum in which case the charge to a bank on balances of over HK\$ 200 millions in its clearing account would be 88% per annum. It could of course be higher or lower, depending upon the chosen figure for the specified rate, and under System B the chosen rate would again be whatever rate the Association after discussion with the Financial Secretary considered necessary to achieve the objective of the rule. Banks are at liberty to pass on the charge at a higher rate should they feel this to be warranted. To the extent that any banks are holding speculative long Hong Kong dollar positions for their own account the charge would properly be for their own account.

"The Association has decided that all funds collected under this new rule from the Management and Settlement Banks will be paid over to Government by the Management Bank of the Clearing House.

"I would stress that for the moment the specified rate is zero % per annum. The punitive charge will commence if and when a change to the specified rate is announced.

"The application of this measure will be seen as stringent and unpopular in some quarters. However, the Hong Kong Association of Banks feels it has a duty to intervene if there is a threat of damage to genuine business activity on which the community relies for its livelihood - and is not prepared to allow this damage to continue unabated.

"We have seen all too recently the consequences of overheated speculation. This rule has been adopted in what the Hong Kong Association of Banks sees as the wider public interest."

The second part of the scheme known as the Deposit Charge Rule concerns the passing on of these charges to customers, and is best explained by reference to the letters which individual licensed banks have recently sent out to their customers warning them that certain credit balances in excess of HK\$1 million could be liable to charges should the first part of the scheme be implemented. A copy of one of these letters (issued by the Standard Chartered Bank in Hong Kong) is shown in the box on page 28.

The consequences of negative interest rates for the Hong Kong banking system can be analysed from the standpoint of the impact it will have on the behaviour of (a) the licensed banks, and (b) the non-bank public.

Since the "specified rate" will apply to incremental credit balances of licensed banks at the Clearing House, the banks will have a powerful incentive to try to minimise their clearing balances. The easiest way for a bank to reduce its clearing balances is to increase its lending to the maximum possible capacity. This means that if banks expect that the "specified rate" scheme is to be

NOTICE TO EXISTING CUSTOMERS

Dear Customer,

30th January 1988

Charges on Credit Balances in Hong Kong Dollars

1. By virtue of an amendment made to the Hong Kong Association of Banks' Rules on Interest Rates, the Committee of the Hong Kong Association of Banks is empowered to make rules requiring banks in Hong Kong to impose charges against credit balances held for customers in Hong Kong Dollars. This follows changes to the Rules of the Clearing House of the Hong Kong Association of Banks whereby the Committee of the Association is empowered to levy charges against the bank's own clearing balances which are payable to the Exchange Fund of the Hong Kong Government.
2. These measures are intended to deter excessive speculation on any possible revaluation of the Hong Kong Dollar.
3. The rates will be decided by the Committee of the Hong Kong Association of Banks from time to time after consultation with the Financial Secretary and are expected to apply to Current Account and Savings Account balances in Hong Kong Dollars to the extent that they exceed HK\$1,000,000. During the period when charges on credit balances are effective, Time Deposits in Hong Kong Dollars including swap deposits of less than three months' duration and Call Deposits in Hong Kong Dollars will not be accepted by the bank. Call Deposits which are in place when the charges are imposed and Time Deposits including swap deposits which mature whilst charges are in effect without instructions to renew for a period of three months or more or other disposal instructions will be aggregated and be subject to charges in the same manner as Savings Accounts.
4. The Bank hereby gives notice to all customers that with effect from 10th March 1988 (the "Variation Date") it reserves the right without further notice:
 - (a) to levy deposit charges ("Charges") in accordance with the Rules on Interest Rates and Deposit Charges and determinations thereunder on credit balances on Current and Savings Accounts;
 - (b) to terminate Call Deposits on or at any time after the Variation Date and to levy Charges on the proceeds in the same manner as for Savings Accounts pending further instructions;
 - (c) upon maturity of any Time Deposit or swap deposit when no express disposal instructions have been given to the bank which can be accepted by the bank (see paragraph 3 above) to levy Charges on the proceeds in the same manner as for Savings Accounts pending further instructions;
 - (d) to aggregate the proceeds of deposits referred to in paragraphs (b) and (c) above for the purpose of imposing Charges; and
 - (e) to impose Charges on the repayment of any Time Deposit or swap deposit of three months or more prior to the expiry of three months from the making of the Deposit at the rate for Savings Accounts for the period from the date of making the deposit to the date of its uplift.
5. Current and Savings Account Holders and Call Deposit Holders with Hong Kong Dollar balances who wish to avoid the effect of these charges may do so by placing their funds on deposit for three months or more or by closing their accounts or uplifting their Call Deposits and (in the case of closure or uplifting) making arrangements to dispose of the proceeds. Account Holders with Hong Kong Dollar Time Deposits including swap deposits should ensure that on maturity instructions are given to the bank for the disposal of the proceeds of the deposit.
6. Any Account Holder who does not take the appropriate action as described in paragraph 5 above or who continues to operate his account after the Variation Date may be subject to Charges which may be imposed in the manner set out above.

Yours faithfully,



R. Carstairs
Chief Manager, Hong Kong

imposed in the near future they will take every step possible to find new customers, to extend their mortgage lending, to extend their lending to traders, industrialists and investors, and they may also attempt to draw down their clearing balances by making investments in commercial paper, CD's and other marketable instruments. The net effect of increasing their lending and other investments in this way will be to expand correspondingly their deposits, and as a consequence the overall money supply in Hong Kong, i.e. HK\$ M3, will accelerate.

In addition to attempting to avoid having large positive clearing balances, the banks also have to face the problem of how to pass on the "specified rate" charges to their customers. On any one day a large bank in Hong Kong has many thousands of items processed through its clearing account and it is therefore impossible to determine on any fair basis, which particular transaction or transactions were responsible for the bank's clearing balance having increased. Because of the difficulty of passing on these charges the Hong Kong Association of Banks has devised a scheme whereby deposits in excess of HK\$ 1 million may be subject to penalty charges during periods when charges on credit balances at the Clearing House are effective. This rule is clearly highly discriminatory and there have been numerous requests by different groups such as pension funds, charitable trusts and other bona fide holders of Hong Kong dollars for exemption from this provision. Some smaller banks will be very reluctant to impose these charges on their customers and we can expect a variety of subterfuges in order to avoid customers having to suffer these penalties.

Of course, individuals and corporations may attempt to hold cash instead of deposits but this is likely to be discouraged by the banks and, in any case, runs serious security risks. Therefore the main response of individuals and corporations is likely to be that they will attempt to hold assets in Hong Kong other than bank deposits which would be liable to the penalty charges.

The net effect of these reactions by banks and individuals will be to accelerate the transmission of speculative capital flows from temporary inflows into permanent increases in the Hong Kong dollar money supply via more rapid growth of bank lending, and to create a preference for assets which are not bank deposits - such as equity shares, CDs, commercial paper and cash, i.e. a decline in the demand for deposit money relative to other HK\$ assets. Assuming there is no revaluation of the Hong Kong dollar, then as a result of faster money supply growth the domestic price level can be expected to rise more rapidly than otherwise. In the final analysis therefore the Hong Kong economy would "adjust" to the speculative capital inflow by a rise in domestic prices rather than through a change in the external value of the currency. By raising the internal price level through inflation, this kind of adjustment would undermine Hong Kong's export competitiveness and over time Hong Kong's overall trade position could be expected to deteriorate somewhat as exports slowed in response to higher wages and other domestic costs, and imports accelerated.

2. Negative Interest Rates - The Swiss Experience.

In the post war period Switzerland, unlike Hong Kong, has maintained foreign exchange controls which required commercial banks to differentiate between resident and non-resident account holders in Swiss Francs. In the period

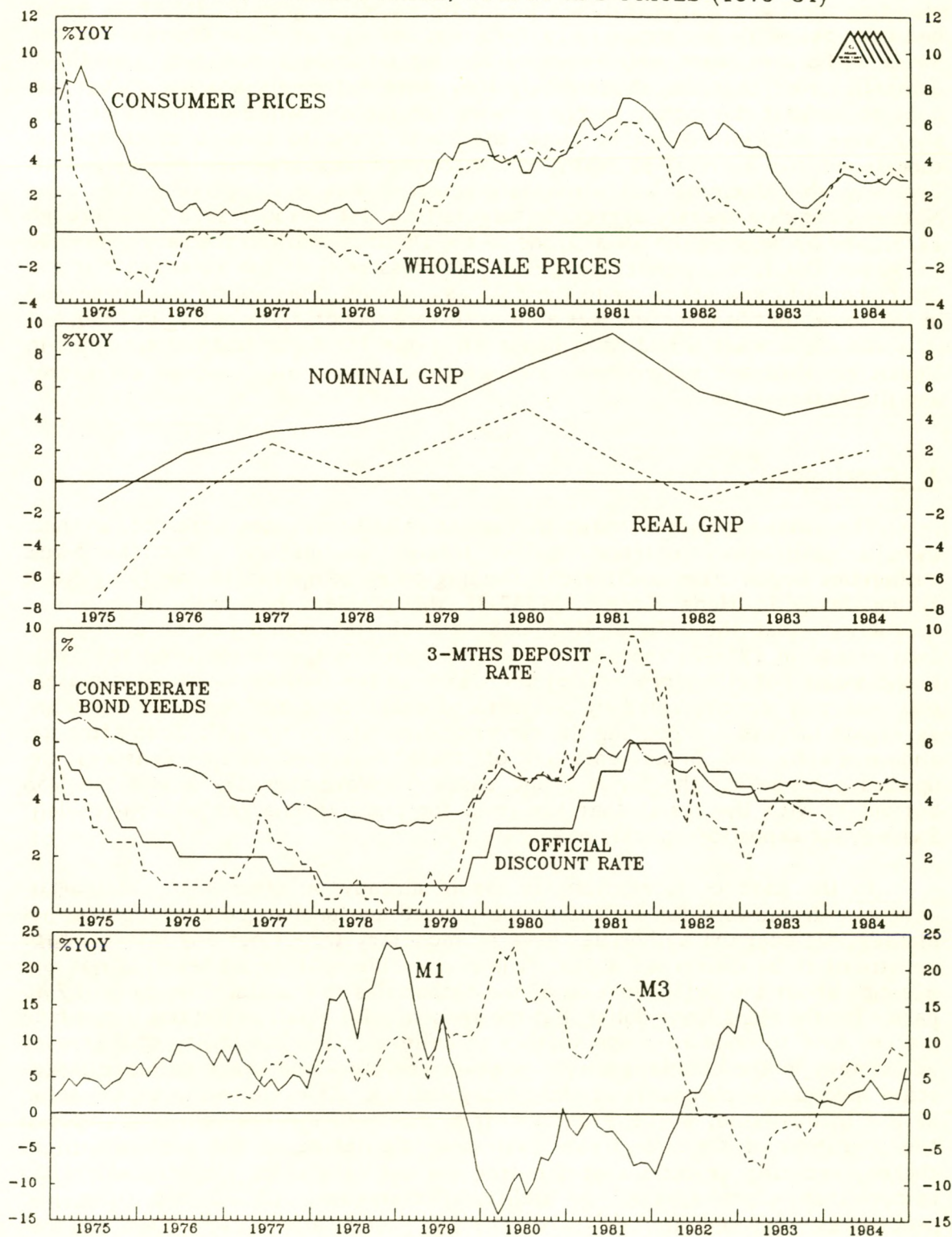
1964-66 a ban was imposed on the payment of any interest on such non-resident deposits in Swiss Francs. The same framework was revived from 4th July 1972, this time with a provision for a tax to be imposed on any increment in those deposits in Swiss Francs held by non-residents. Initially the charge was set at 2% per quarter. From 1st October 1973 the penalty fee was suspended, only to be reimposed from 20th November 1974 at a rate of 3% per quarter - as usual, on any increment. From 22nd January 1975 the rate of tax was increased to its maximum level of 10% per quarter. After the Swiss Franc had peaked in November 1978 the speculative pressure abated and one year later, on 1st November 1979, the tax rate on non-resident deposits in Swiss Francs was lowered to 2.5 per cent per quarter. As from 1st December 1979 the tax rate was suspended (i.e. reduced to zero), and as from 20th February 1980 the whole scheme was finally abolished.

In addition to the tax charges against credit balances held in Swiss Francs by non-resident depositors, the Swiss authorities found it necessary to take various other legislative actions in order to prevent individuals and corporate depositors from exploiting some of the more obvious loopholes. For example, between 14th April 1976 and 20th April 1977 a limit was imposed on the importation of foreign banknotes, restricting each individual to the equivalent of SF 20,000. This particular restriction was aimed at Italians, but in 1978 a more general step was taken when the Federal Post Office administration made an informal agreement with the Swiss National Bank not to accept large non-resident accounts in Swiss Francs - i.e. not more than SF 100,000 in cash accounts in Switzerland.

According to the International Currency Review Swiss commercial banks were prohibited from placing Swiss Franc denominated bank notes in safe deposit boxes rented by non-residents, and in addition, Swiss banks were not permitted to keep cashier's cheques on file with large denominations drawn in their name to the order of foreign clients. Finally, Swiss commercial banks were threatened with the requirement to open foreign currency accounts at fixed rates of exchange. (We have not been able to verify these three supplementary restrictions with the Swiss National Bank, but they would appear to be consistent with the general tenor of restrictions imposed at the time). This list of administrative provisions indicates how difficult it was for Switzerland - which at the time was a relatively open economy with a relatively free financial system - to prevent foreigners speculating on a revaluation of the Swiss franc by means of penalties on supposedly speculative transactions. Much more important in restoring stability to the Swiss monetary system and reducing foreign speculative pressure were the measures taken at a macro-economic level to deflect speculation away from the Swiss currency and onto the Deutschemark.

The years 1977-78 witnessed a period of dramatic US dollar weakness, which precipitated a general flight from US dollars into commodities, precious metals, real estate, and into other "hard" currencies, in particular the Swiss Franc. Initially the Swiss authorities allowed their currency to appreciate from SF 2.45 per US dollar at the end of December 1976 to SF 1.98 by the end of 1977, and then to an ultimate peak of SF 1.46 in November 1978. However, during 1978 the upward pressure on the Swiss franc became very acute, requiring the Swiss National Bank to intervene heavily in the foreign exchange market, buying US dollars and selling (i.e. creating) Swiss francs. The net result (see Chart

SWITZERLAND : CHART 1
MONEY, INTEREST RATES, OUTPUT AND PRICES (1975-84)



opposite) was a sharp acceleration in the Swiss M1 money supply, from 4% year-on-year in the final quarter of 1977 to 22% in the final quarter of 1978, clearly violating the Swiss National Bank's target for monetary growth. Inflation, which had been below 2% per annum in 1977-78, was not an immediate concern, but the Swiss authorities were well aware of the lagged impact of money growth on domestic price changes. Accordingly they were extremely anxious on the one hand to prevent the money supply growing too rapidly, while on the other hand they were determined not to allow the Swiss franc to rise so much that it threatened the survival of many of Switzerland's export-oriented companies. The way this dilemma was ultimately resolved was by suspending the Swiss National Bank's monetary aggregate targets from 1st October 1978 (and through 1979), and by pegging the Swiss franc to the Deutschemark in the range SFr 0.80 - 0.90 per DM 1, thus deflecting speculative pressure from the Swiss franc to the Deutschemark, and hence on to the EMS as a whole. This policy was successful in the sense that Switzerland was able to restore monetary targeting in 1980, but it is not clear what would have happened if the US dollar had not troughed in November 1978 and subsequently strengthened against all European currencies and the Japanese yen.

3. Conclusion.

The Swiss experience shows that negative interest rates were not, on their own, a satisfactory defence against foreign speculators. But the Swiss authorities began from a different starting point compared to the Hong Kong authorities. In Hong Kong in 1987-88 the problem has been to convince speculators that the official HK\$/US\$ rate of 7.80 would not be altered; in Switzerland in 1977-78 the problem was to convince speculators that the Swiss Franc would not rise more against the US\$ than the Deutschemark. Ultimately this was only accomplished by Switzerland abandoning her domestic monetary aggregate targets, and pegging the currency explicitly to the DM. Soon after the announcement and implementation of these macro-economic measures the upward pressure on the Swiss Franc eased (in November 1978), and the US\$ bottomed, with the result that the need for punitive charges on non-resident Swiss Franc depositors quickly evaporated.

In the case of Hong Kong it should already be clear that the macro-economic framework for maintaining a pegged and unchanged exchange rate is already in place: the authorities have no monetary target nor any interest rate constraint to be concerned about. The real problem, it would seem, is not any question about the determination of the authorities to maintain the current 7.80 parity for the Hong Kong dollar, but the tendency for small deviations in the free market rate to encourage speculators to believe in the possibility of a greater adjustment to the official parity - however remote - and hence to make large-scale speculative purchases of Hong Kong dollars. As explained in a companion article in this issue, we believe the best approach to this problem is to improve the operation of the linked rate system by tightening up the cash arbitrage, thereby reducing deviations of the free market rate from the official parity, rather than superimposing an additional framework of ad hoc rules and procedures designed to deal with the symptoms arising from the current imperfections in the system. Better to perfect the system than to pile additional weapons on to an imperfect mechanism.

JAPAN: FISCAL POLICY ON AN EXPANSIONARY TACK

It is clear that the Japanese government has adopted an expansionary fiscal policy for the current fiscal year but still many observers remain sceptical as to the extent and effectiveness of such a policy. This scepticism is, to some extent, understandable given the history of the last twelve years of fiscal policy.

During the period September 1976-September 1977, for example, there were at least five separate sets of fiscal measures designed to stimulate the domestic economy. In October 1976, a Special Finance Bill was passed allowing the government to float bond issues of up to Yen 3.735 trillion. In November, a seven-point package of fiscal measures was approved, with a further supplementary budget in January. Yet despite all these packages, the domestic economy entirely failed to respond. The reason for this was the extremely restrictive monetary policy being conducted at the time by the Bank of Japan.

By 1981, the emphasis of fiscal policy had switched to one of restraining expenditure and thus reducing the level of government deficit-financing bond issues. The government budget had suffered from a large deficit since 1975, this being the result of a variety of factors: firstly, the economy had been late to recover after the first oil crisis; secondly, increases in tax revenue had been poor; and thirdly, structurally inflexible expenditures, such as social security expenses and the burden of government bond interest payments (which was already above that of major western countries) had been steadily increasing.

With the publication of the Maekawa Report in April 1986, this extended period of fiscal austerity effectively came to an end. This report on the Japanese economy focused on Japan's need to shift away from its reliance on exports towards a more domestic demand-related economy. There was to be the "flexible" implementation of monetary policy, stepped-up public works projects, urban development, housing construction and private-sector investment, and the recycling of gains made from the strengthening yen. Nevertheless, even with the report's approval, sceptics abounded. For instance, the business paper *Nihon Keizai* issued a blistering editorial on the inadequacy of such measures, saying that it was the product of defensive-minded bureaucrats unwilling to change policies.

However, this scepticism has proved misplaced in the light of FY1987 fiscal policy. The expansionary set of fiscal measures in 1987 was characterised by a number of important themes. One important theme was that of bond issues to finance the deficit on the General Account of the government budget. Two types of bonds can be issued by the Japanese government - construction bonds and deficit-financing bonds. The difference between the two is largely technical in that the level of deficit-financing bonds is fixed by the Diet while more construction bonds can be issued as the financial year progresses. Funds raised through the issue of construction bonds are also earmarked solely for capital investment and thus increase the government's assets. In 1983, the government declared a target of reducing issues of deficit-financing bonds to zero by 1990,

OUTLINE OF JAPANESE BUDGET SYSTEM

A. TYPES OF GENERAL BUDGETS

- (i) The General Account Budget: the basic account to promote the major programmes of the budget thus, in theory, directly reflecting government policy. All national taxes are treated as revenue of the general account except for certain special taxes, e.g. the local road tax, the special tonnage due, etc.
- (ii) Special accounts budgets: these are instituted under legislation to carry through specific projects, administer specific funds, etc. Each of these budgets has its own distinct source of revenue.
- (iii) Budgets of government-affiliated agencies: corporate-style management, but budgets must be approved by the Diet, e.g. the National Finance Corporation, the Housing Loan Corporation and the Japan Development Bank.

The composition of the General Account Budget is set out by law. The fiscal year runs from April 1 to March 31.

B. PROVISIONAL AND SUPPLEMENTARY BUDGETS

- (i) Provisional Budget: when the General Account Budget cannot be approved by April 1, the Cabinet can compile and submit a provisional budget to cover a specified period. It becomes invalid as soon as the General Account Budget is approved. This was the case for FY 1987, when fierce debate over the proposed sales tax forced the LDP to pass a 50-day interim budget of Yen 8.8 trillion.
- (ii) Supplementary Budget: can only be passed in two cases:-
 - (a) to supplement a shortage of funds necessary to meet legal or contract duties of the government.
 - (b) to modify the General Account Budget for reasons having arisen after the Budget is compiled.

C. THE FISCAL INVESTMENT AND LOAN PROGRAMME (FILP)

The FILP is drawn up in conjunction with the national budget and is also subject to Diet approval.

Funds come from various sources:-

- (i) Postal Savings and surplus funds and reserves of Special Accounts, such as the Welfare Insurance Special Account and the National Pensions Special Account, must be deposited in the Trust Fund Bureau. The Trust Fund Bureau makes loans with these funds.
- (ii) The reserve for the Special Accounts for Postal Life Insurance and Postal Annuity.
- (iii) Investments and loans made by the Industrial Investment Special Account to various projects.
- (iv) Issuance of domestic bonds by institutions such as the Japan Highway Public Corporation, the bonds being guaranteed by the government.

The funds are allocated only to revenue producing projects where the beneficiary can be specifically identified, or as social overhead capital formation. Their objective is to enhance public policy especially in the fields of housing, highways, railroads and small to medium-sized companies.

GOVERNMENT ACCOUNTS

¥ trillion

	1982	1983	1984	1985	1986	1987(E)	1988(E)
Central Government							
General Account Budget							
Total Expenditures							
(Actual Figures)	47.2	48.4	51.5	53.0	53.8	58.2	56.7
Expenditures:							
General Expenditures	32.8	32.9	33.2	33.1	33.4	34.8	34.3
Social Security	9.2	9.3	9.8	9.8	10.1	10.1	10.4
Public Works	7.2	7.2	7.1	6.9	6.9	7.4	6.1
Defence	2.6	2.8	3.0	3.2	3.3	3.5	3.7
Grants-in-aid to Local Govt.	7.5	7.3	9.0	9.7	9.7	12.2	10.9
National Debt Service	6.9	8.2	9.2	10.2	10.7	11.3	11.5
Revenue:							
Tax and Stamp Receipts	30.5	32.4	34.9	38.2	39.4	42.9	45.1
Personal Income Taxes	12.8	13.6	14.1	15.4	16.4	16.5	17.2
Corporate Taxes	9.1	9.8	11.3	12.0	11.7	11.8	14.0
Indirect Taxes, etc.	7.9	8.1	8.6	9.7	10.0	11.4	11.6
Non-Tax Revenue	3.4	5.8	4.5	3.5	2.9	4.5	1.5
Public Bonds:	14.0	13.5	12.8	12.3	11.5	10.7	8.8

Notes:

- * Actual figures up to FY1985, supplemented budget for FY1986 and FY1987.
- * Inclusion of Yen 1.3 trillion interest-free loan from NTT account brings FY 1988 figure for public works to Yen 7.4 trillion.

this being more of a political than economic target. Duly, the level of deficit-financing bonds in FY1987 has decreased and instead the financing of fiscal stimulus to the domestic economy has come from increased issues of construction bonds, as well as the utilisation of funds raised from privatisations and increased funding from the Fiscal Investment and Loan Programme (FILP). Another important theme has been the issue of tax reform, which also moved strongly into the limelight, reflecting partly the inequality of the existing tax system, and partly the need for tax revenue to cover a greater percentage of General Account Budget expenditure.

The remainder of this article considers these issues in more detail as they affect current and prospective trends in overall government expenditure and the financing of that expenditure.

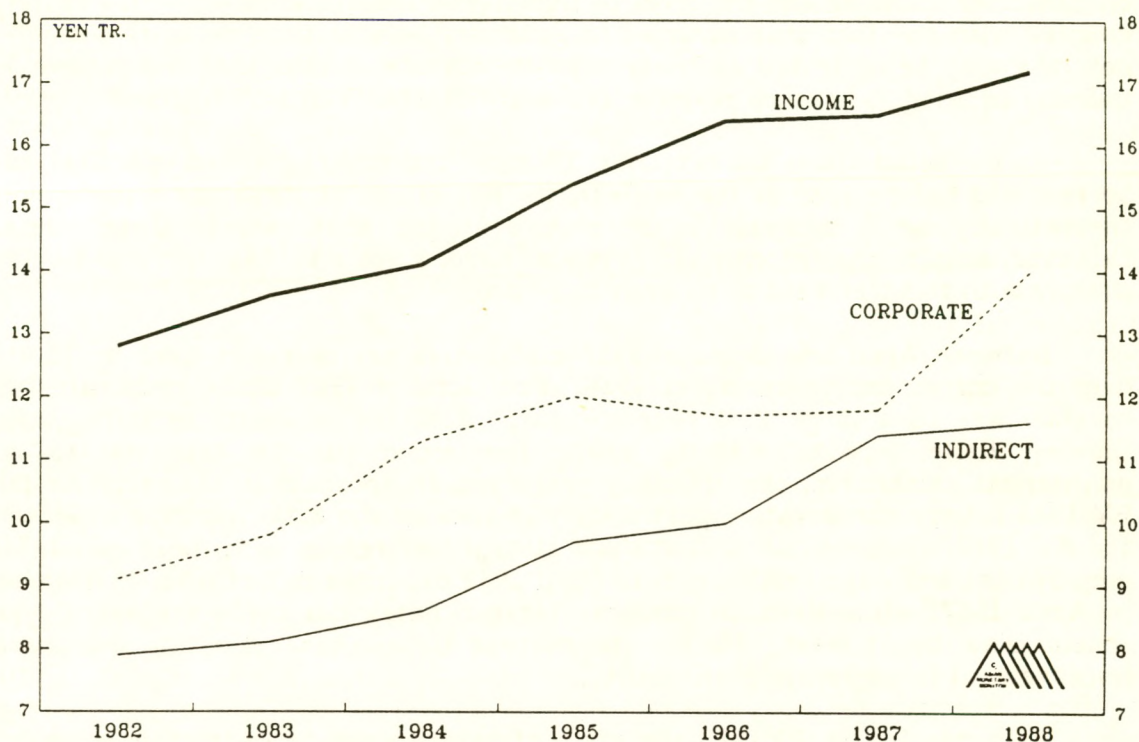
Trends in Budget Funding

In November 1980, largely in response to the need to reduce the government deficit, the Tax Commission framed a basic policy, the so-called "medium-term recommendation", asserting that the ratio of national tax revenue to total national government expenditure should be raised to above 80%. In 1981 and 1982 successive reports insisted that tax increases should not be implemented, but that financial soundness should be restored by curtailing and rationalising expenditure. Annual tax reforms were only carried out on a small scale and remained within the framework of the current tax system. Until recently this was the path which the government followed, but by 1985 it was clear that the government was not even close to reaching its target, with the ratio of tax revenue to national government expenditure standing at 70.7%, compared to 84.5% for the U.K., 79% for the U.S., 81.2% for West Germany and 79.5% for France.

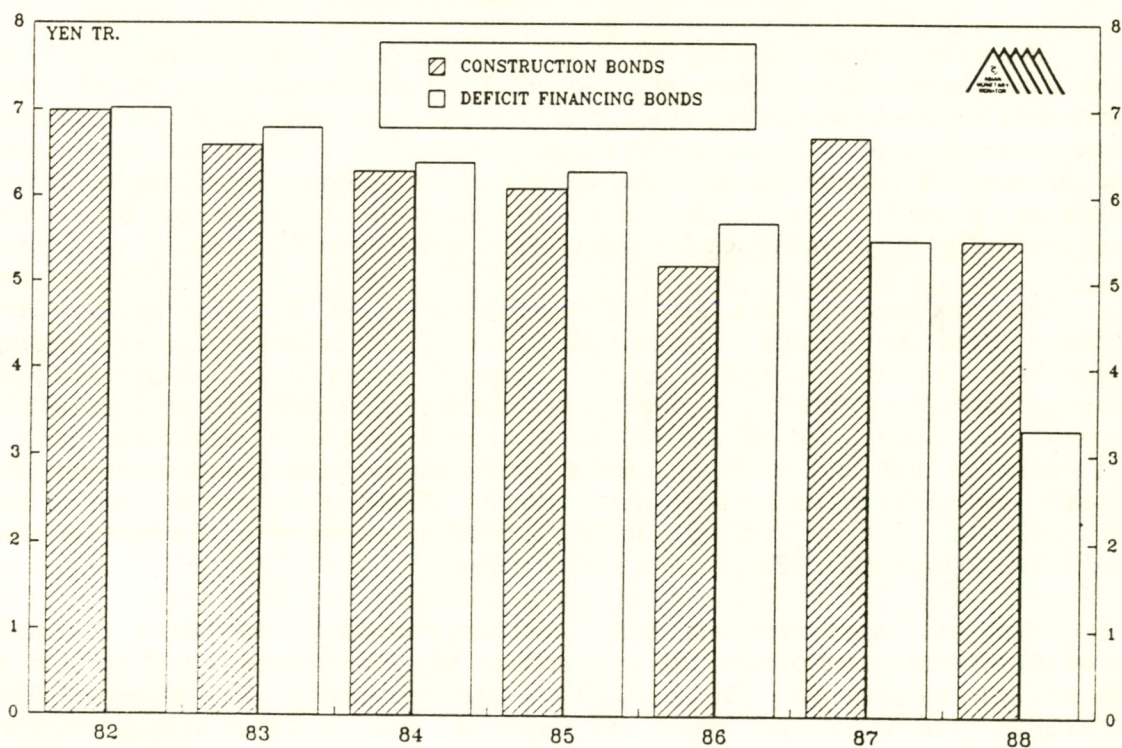
Contrary to most opinion, however, the recent tax reform proposals have not been specifically aimed at increasing revenue from taxation. Rather they have largely been aimed at reducing the middle income bracket's tax burden. From October 1987 the level to which minimum income tax rates apply has been expanded, this tax cut meaning an estimated Yen 1.54 trillion decrease in revenue for the current FY1987 and a Yen 2 trillion decrease for FY1988. Some reform of the corporate tax structure is also taking place. The 1.3% corporate income tax surcharge on the normal rate of 42% expired in March 1987, while the Ministry of Finance recently decided to submit a tax revision bill to the Diet that should bring another 2% reduction in corporate income tax from Spring 1988. The goal, however, of overhauling corporate tax rates completely is unlikely to occur much before 1990.

These income and corporate tax cuts are intended to be offset by the reform of the tax-exempt savings system (which includes the "maru-yu" system). At the present time, the system operates as follows: individuals can hold Yen 3 million in postal savings, Yen 3 million in commercial bank savings accounts, Yen 3 million in another separate account provided the money is to be used to acquire a fixed asset, with salaried workers allowed a further Yen 5 million under the same conditions - all without paying tax on interest earned. In practice, many people have opened multiple accounts, adopting multiple identities. The abolition of this system with the introduction of a 20% tax on

JAPAN: CHART 1
TAX BREAKDOWN



JAPAN: CHART 2
GOVERNMENT BOND ISSUES



interest from savings is likely to produce various effects. There will be some outflow of money from maru-yu accounts which could have a positive effect both on consumer spending and the level of liquidity in the stockmarket. This factor, coupled with the fact that savings are generally held as time deposits with the new tax only being levied as these deposits mature, means that the reform is unlikely to bring in as much revenue as the anticipated Yen 1.65 trillion.

As the debate over the proposed 3% sales tax still rages, and is unlikely to be resolved before 1989 at the earliest, the net effect of these tax reforms will theoretically be a decrease in revenue over the next two to three years. However, despite the reforms tax revenues have, since FY 1986, increased quite sharply with this trend set to be even more pronounced for FY 1988.

Between April and October 1987 cumulative tax revenues were up 12.4% over the corresponding period of 1986. For October 1987 alone, corporate tax revenue was up a large 25% year-on-year. With the economy so strong, and showing little sign of slowing down, this trend can be expected to be maintained. Moreover, the officially projected 5% increase in tax revenues for FY 1988 is very conservative particularly in view of the 8.8% increase expected for FY 1987. Income tax should show stronger increases with more people in employment and wage settlements in April 1988 expected to be higher than those in April 1987, while even on conservative estimates the corporate tax figure should grow by at least 12% for the current fiscal year reflecting the sharp improvement in corporate profitability.

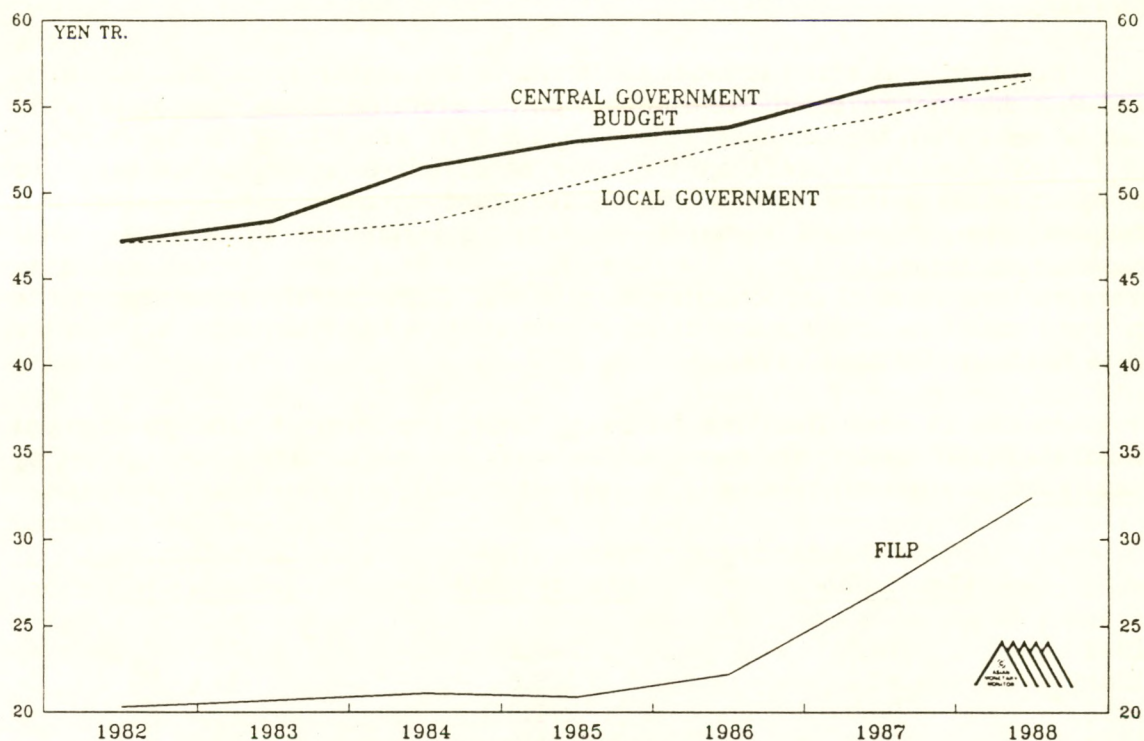
As a result, for FY1988 the ratio of tax revenue to central government budget expenditure should reach 79%, compared to 73.8% for FY1987 (tax revenue as a percentage of the General Account and supplementary budget combined).

A further factor allowing decreased reliance on government bond issues to finance expenditure has been the proceeds from the privatisation of NTT, the domestic telecommunications monopoly. All proceeds from NTT share sales go into a special account called the "Kokusai Seiri Kikin". This account is primarily to finance the retirement of maturing government bonds, but funds from this account can also be used to provide no-interest loans to various projects - Yen 1.3 trillion is being earmarked for public works projects in FY 1988.

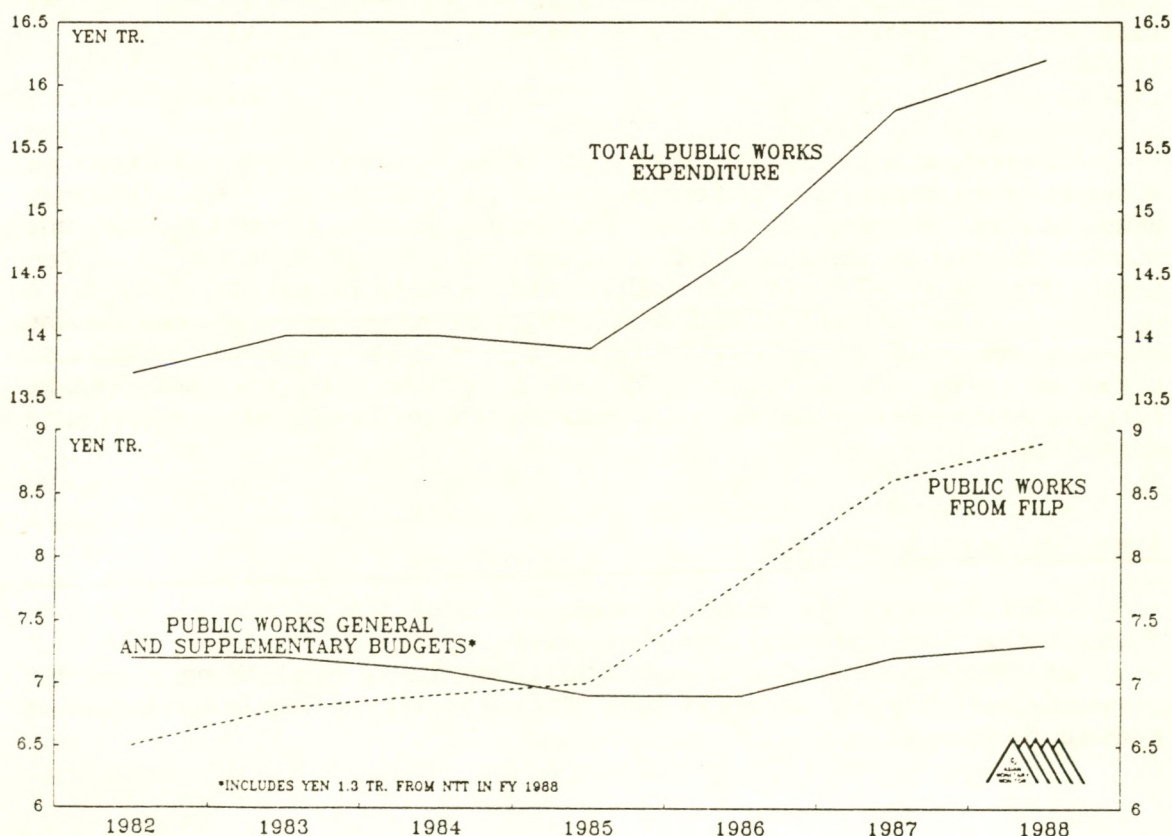
Non-tax revenue has also increased sharply in FY1987, to Yen 4.51 trillion. Non-tax revenue includes various miscellaneous items such as proceeds from sales of stock in previously state-owned companies (the proceeds from NTT are excluded from this due to their enormous size) and profits from post office operations. The bulk of the current fiscal year's increase has come from profits generated by the Bank of Japan. For FY1988 the Bank of Japan is expecting a drastic reduction of its profits, mainly due to US dollar support operations and the resulting foreign exchange losses. Non-tax revenue in FY1988 is thus expected to drop back 67%, to Yen 1.47 trillion.

With increased revenues from taxation resulting from rapid economic growth, increased use of the FILP rather than the general account of the budget to promote expansionary policies, and the proceeds from NTT, it seems likely that the government will reach its target of reducing the issue of deficit-

JAPAN: CHART 3 TRENDS IN PUBLIC SPENDING



JAPAN: CHART 4 PUBLIC WORKS EXPENDITURE



financing bonds to zero by 1990. This is borne out by the reduction in the issue of deficit-financing bonds from Yen 5.5 trillion in FY1986 to Yen 3.65 trillion in FY1987.

However, this statistic hides the trend in the overall level of bond issues, and thus does not reveal the real impact on the overall national debt burden. As can be seen from the bar chart (Chart 2), the level of construction bonds issued in FY1987 rose by more than the issue of deficit-financing bonds fell. To complicate the picture further, inadequate grants-in-aid to local governments, coupled with increased demands on local governments to increase their expenditure (especially on public works), led to local governments having to increase their level of construction bond issues. Consequently, their dependence on bond issues for the funding of their own budgets has risen from 8.4% in FY 1986 to about 10% for FY1987.

As can be seen from the following table, the level of total government bonds (deficit-financing and construction bonds, but not including bonds issued by local governments) outstanding is, as yet, not showing any significant decrease.

	<u>Bonds Outstanding</u> <u>(Yen trillion)</u>	<u>Nom. GNP</u> <u>(Yen trillion)</u>	<u>Govt. Bonds</u> <u>% Nom. GNP</u>
1980	70.5	245.1	28.7
1981	82.2	259.6	31.6
1982	96.4	272.3	35.4
1983	109.6	284.0	38.5
1984	121.6	303.0	40.1
1985	133.4	320.7	41.5
1986	145.1	334.6	43.4
1987(E)	155.6	348.5	44.6
1988(E)	164.5	368.3	44.6

However, as a percentage of nominal GNP, the level of bonds outstanding is set to begin declining. Furthermore, after the reduction of deficit-financing bonds to zero, the government would then be in a position to start reducing the number of bonds outstanding. In this regard, Yen 2 trillion from the sale of the second tranche of NTT was put straight into the bond retirement fund. More important as far as the national debt service goes, we are now reaching the period where ten-year bonds issued in the high inflation period of 1979-80 will either be rolled over or retired. If they are rolled over, they will then be carrying much lower coupons, thus reducing the national debt service quite dramatically.

Trends in Budget Expenditure

Chart 3 shows the levels of expenditure of the government (General Account plus supplementary), the local governments, and the FILP. The high level of spending demanded of the local governments further underlines the pressure that they are under to fund this without resorting to issuing more construction bonds.

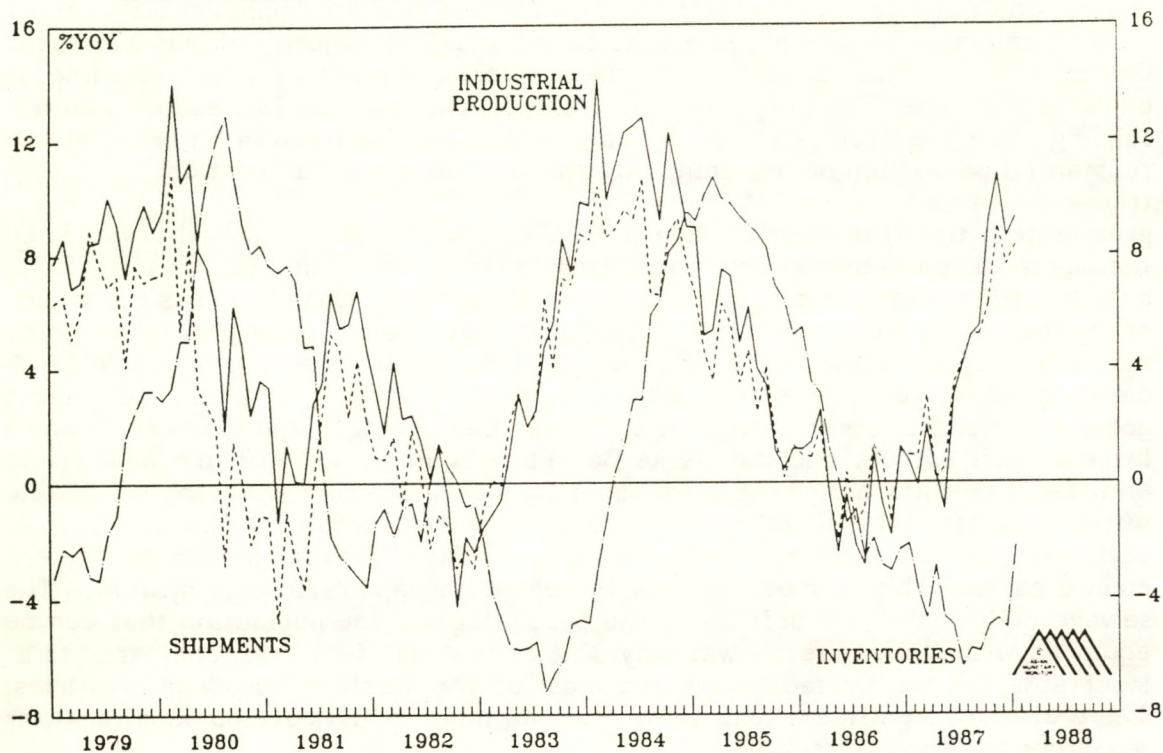
In FY 1987, although the General Account has showed little change from that of FY1985 and FY1986 with spending on public works staying at almost exactly the same level, the addition of a Yen 2.1 trillion supplementary budget gave a real expansionary impulse to fiscal policy. The majority of this was spent on public works, this necessary and planned for, after the 80% front-loading of public works expenditure from the General Account Budget. Just as importantly, funding from the FILP has risen by 26% to Yen 28.03 trillion in FY1987, with a substantial proportion of this going into the Housing Loan Corporation.

Within this framework, it has been the issue of public works that has been seen as most indicative of how stimulatory government policy is. Up until 1985, a "zero ceiling" was placed upon public works spending. Chart 4 shows the trends of spending on public works, highlighting how policy changed from being restrictive up until the end of FY1985, to reflationary starting in FY1986. A plethora of large-scale public works projects have been implemented, most notable amongst these being the Tokyo Bay Bridge and Tunnel, Kansai International Airport and the Osaka Bay Phoenix Project. With the new Prime Minister Takeshita affirming his support for continued high spending on public works projects, the rehabilitation of Japan's infrastructure should be assured. This is largely out of necessity as in many areas Japan lags far behind its western counterparts. This is most obvious in regard to Japan's sewage system. The sewage diffusion rate - defined as the percentage of the population that can be equipped with flush toilets - was only 37% at the end of FY1986, compared to at least 60% for the United States and most of the Western European countries. There are also significant long-term plans to improve and develop Japan's water resources and road system.

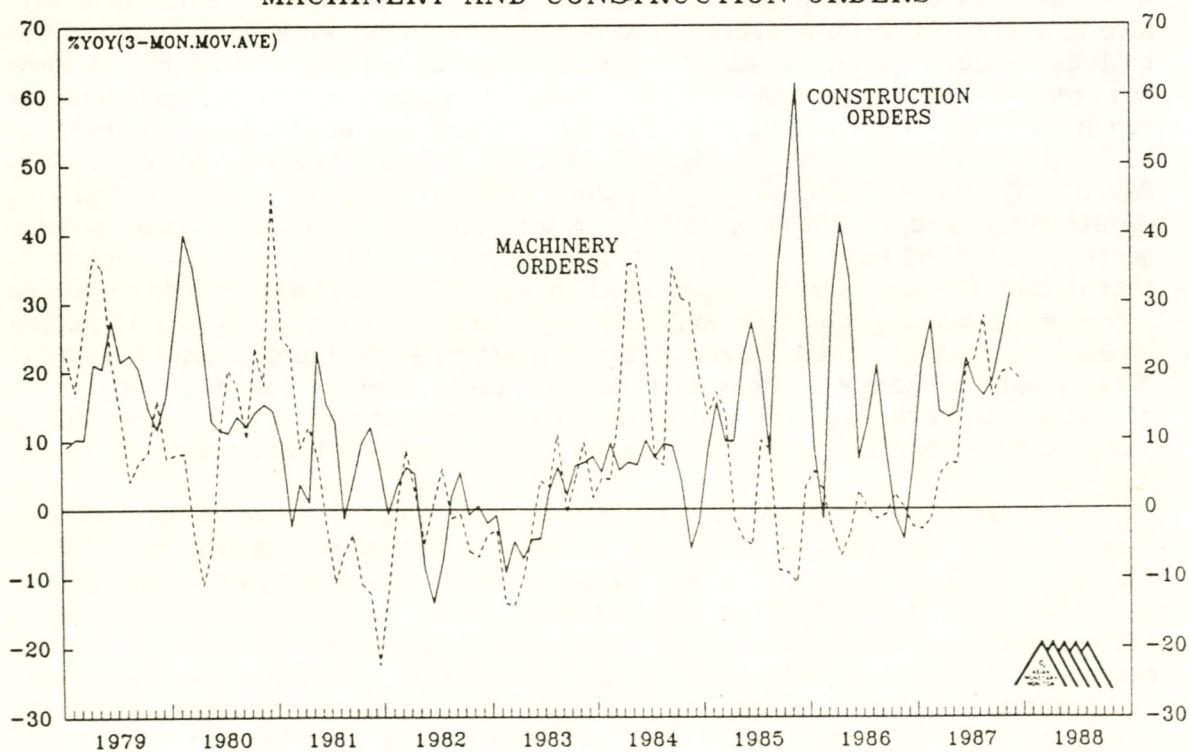
It is very difficult to predict whether the recent rate of increase in public works expenditure will continue. Certainly, when the Yen 1.3 trillion interest-free loan from NTT stock proceeds to be used for public works is included in the FY1988 budget figures, the budgeted level of spending is high, but for it to show any real increase over the FY1987 level, a supplementary budget will be required. Moreover, funding from the FILP, which was originally to increase by 19.7% for FY1988, is now budgeted to show only a very modest 2.6% rise. Admittedly, the level of funding to public works projects is to remain high but, significantly, budgeted appropriations to the Housing Loan Corporation show a decline. This reflects the change in the composition of the domestic economy that is taking place. Over the past one-and-a-half years it has been the massive increase in housing construction, and to a lesser extent, non-manufacturing investment that has been providing the main impulse to the domestic economy. This is set to change as consumer demand takes over as the main engine of growth for the economy. How stimulatory a package the government provides in any supplementary budget will depend very much on how vibrant the economy is.

Two areas of spending in the budget give long-term cause for caution. First, there is the level of grants-in-aid to local governments which, although showing more of an increase in FY1987 than was at first anticipated, still remain far below what is necessary to offset the increased demands being placed upon the regions. Secondly, the level of social security payments continues to remain relatively static. Since the early 1980's, when Japan aimed to raise the quality of its social security services into line with those in Western Europe, little has been achieved. With the number of people over the age of 65 in Japan set to rise

JAPAN : CHART 5
INDUSTRIAL PRODUCTION, SHIPMENTS AND INVENTORIES



JAPAN : CHART 6
MACHINERY AND CONSTRUCTION ORDERS

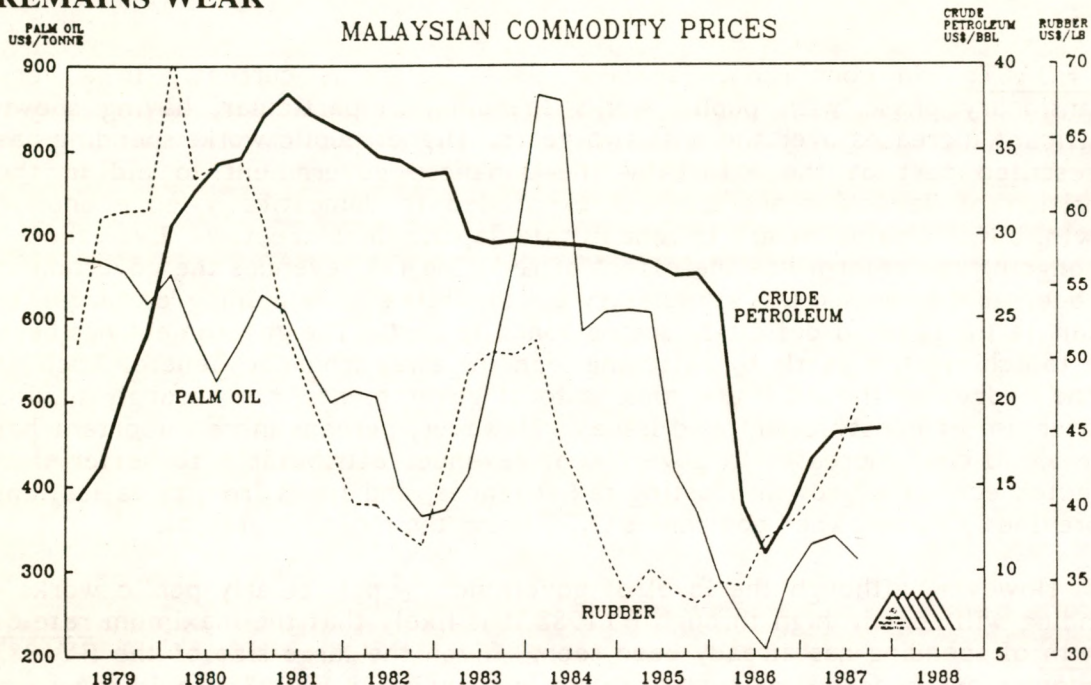


by 4% per annum into the 1990's and beyond, expenditure on social security must increase to become a heavy burden on the budget.

FORECAST: In conclusion, Japanese fiscal policy is currently in a very expansionary phase with public works spending, in particular, having shown significant increases over the past two years. Higher public works spending has represented part of the effort by the Japanese government to aid in the transition of Japan's economy from export-led to domestically-led economic growth, but is also necessary to rehabilitate Japan's infrastructure. Even though the ongoing tax reform has the effect of reducing tax revenues the government has been able to pursue this stimulatory policy while still remaining 'on target' to eliminate the issue of deficit-financing bonds by 1990. The government has been able to achieve this partly by switching spending away from the General Account of the budget to the FILP and also to local governments, and through making greater use of construction bond issues. However, perhaps more important has been significant increases in government revenues attributable to better than expected economic growth boosting tax revenues, and funds from privatisations of previously state-owned companies (NTT being the most important).

However, although the level of government - particularly public works - spending will remain high through FY1988 it is likely that the maximum rate of growth of spending has already been seen. Given the large size of the FY1987 supplementary budget, significant growth in spending in FY1988 would require a supplementary budget in that year also. The size of any supplementary budget will primarily depend upon how vibrant the economy proves to be, with a larger package only likely if the domestic economy shows signs of weakening. However, given that it seems most likely that consumer spending will be buoyant in FY1988 the most likely outcome would be for a smaller budget. Thus, although government spending will continue to contribute positively to economic growth during FY1988, the size of the contribution will probably be diminishing in importance during the year.

MALAYSIA: COMMODITY PRICES IMPROVE, BUT LOAN DEMAND REMAINS WEAK

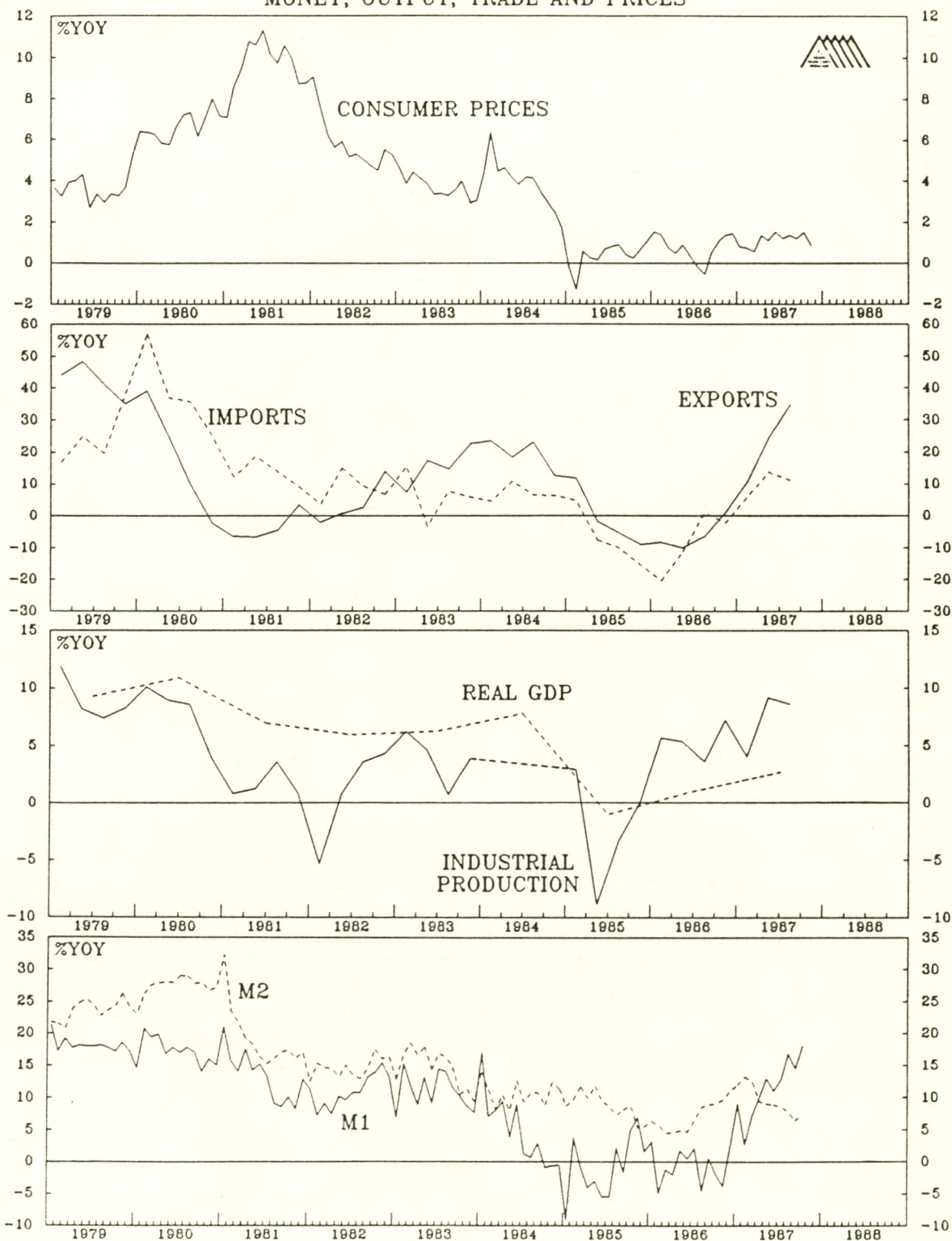


For 1987 Malaysia recorded a nearly M\$2 billion current account surplus - the first since 1979. The recent rises in the prices of Malaysia's major commodities should bring a further improvement in 1988. Over the last three months the rubber price has risen nearly 5% to M\$2.815 per kg and the palm oil price 54% to M\$1180 per tonne. This has lifted them well above the Ministry of Finance's 1988 projections of M\$2.4 and M\$720 respectively, made last October.

However, despite a large money market surplus and short-term interest rates being at their lowest levels in a decade, weak investment spending has restrained bank lending. Money growth has therefore continued slack, with the latest figures for M2 showing year-on-year growth of 7.8% in August, while inflation has remained subdued. In the three months to November the consumer price index fell 0.5%, leaving prices only 0.2% above a year earlier. Apart from political tensions, the major reason for the low propensity to invest continues to be the still low levels of capacity utilisation in the domestic sectors of the economy, and the failure of minimum lending rate to fall as much as money market rates. Although the 1 month and 3 month interbank rates had fallen to 3.1% and 3.3% respectively by mid January, the prime lending rate remained at 7.75%, which given the lack of inflation translates into a very high real rate.

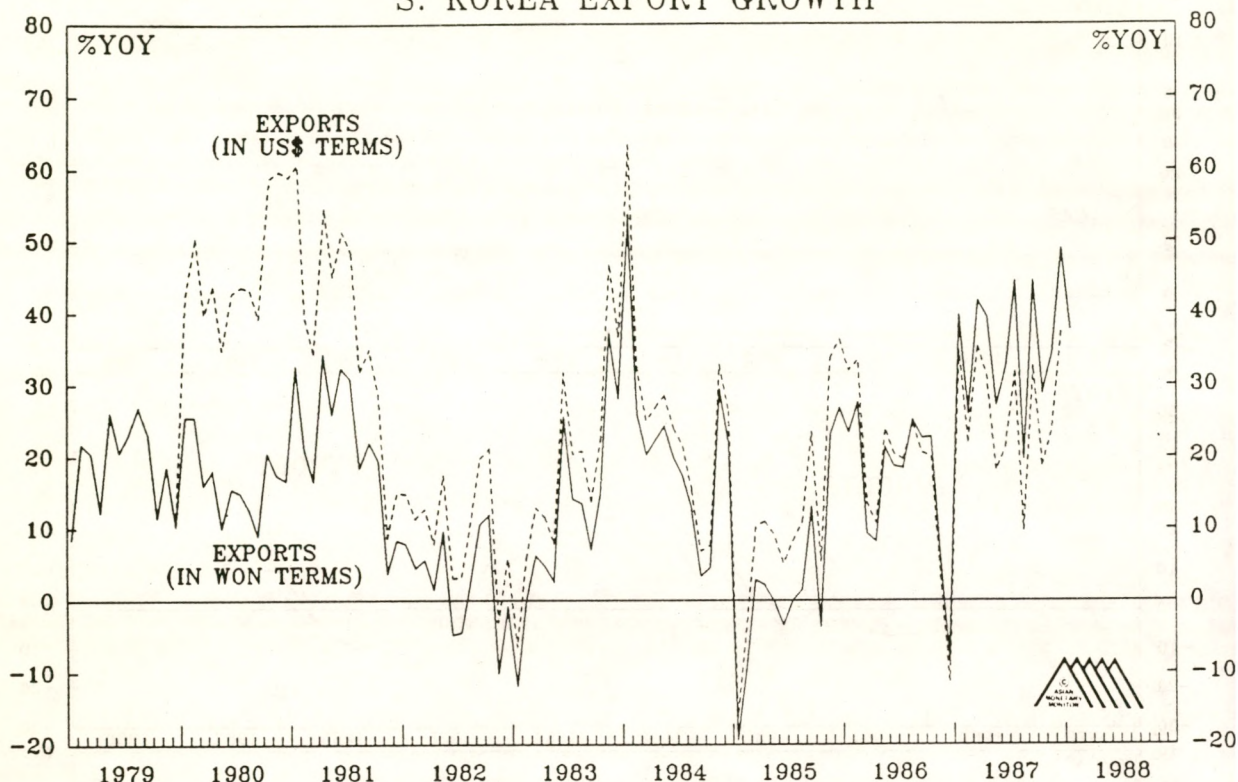
The major reason for this anomaly is that a large portion of the banks' funding is locked in at high rates. In 1986 there was a big build-up in fixed deposits in the wake of the tax exemption granted in the 1986/7 budget on interest earned on deposits in excess of 12 months. In the months ahead these deposits will mature and the prime lending rate should then fall. With the competitive edge gained by Malaysian exporters feeding into stronger domestic demand - exports rose by a provisional 15% in 1987 - investment and credit demand should then begin to strengthen.

MALAYSIA MONEY, OUTPUT, TRADE AND PRICES



SOUTH KOREA: INFLATION IS BECOMING A WORRY

S. KOREA EXPORT GROWTH

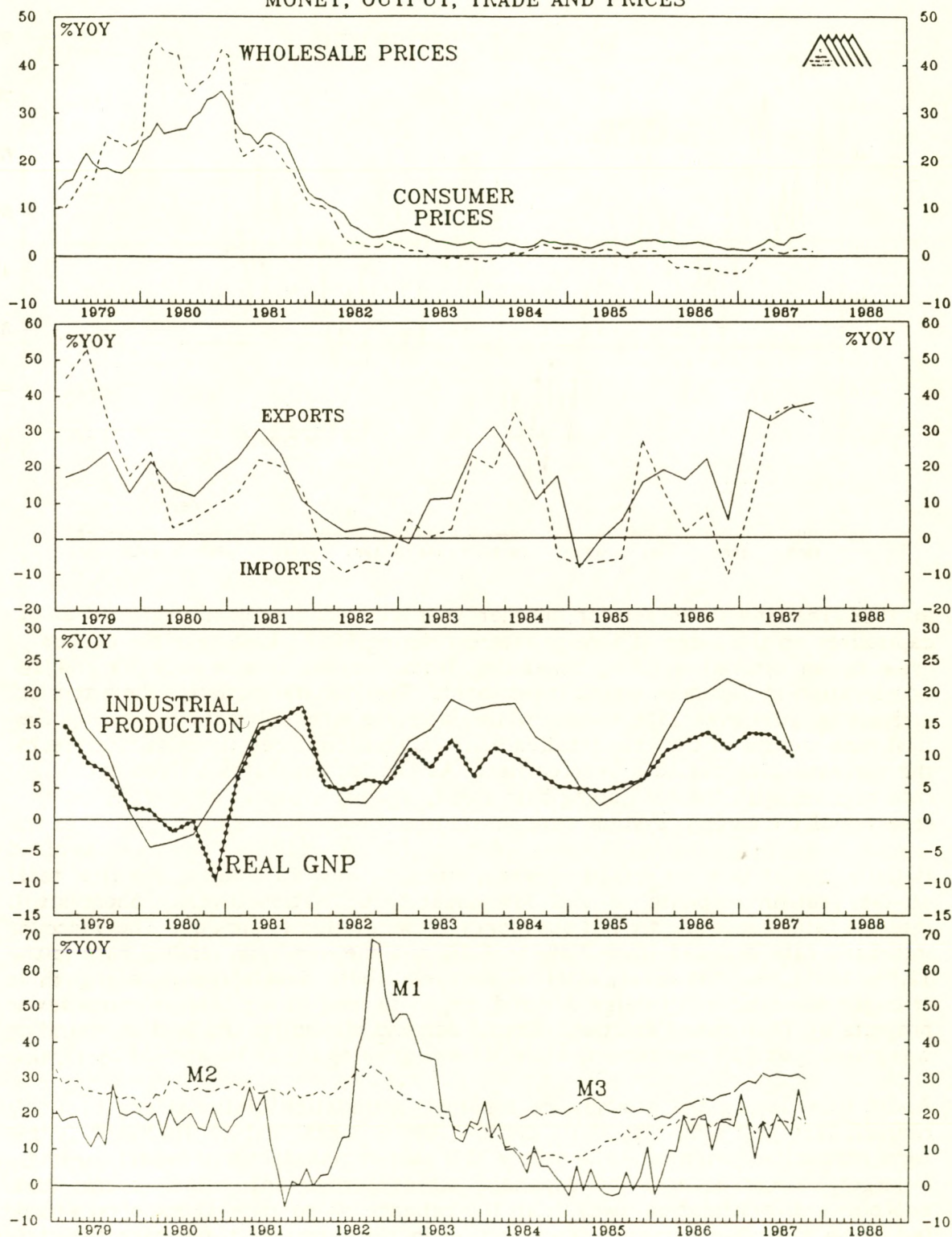


There was a sharp rise in Korean money growth toward the end of 1987. After remaining within the original target of 15% to 18% for most of the year, M2 growth rose to 19.7% in November, causing the authorities to revise their ceiling upwards to 20%. Preliminary estimates put year-on-year growth of M2 at 19.2% in December.

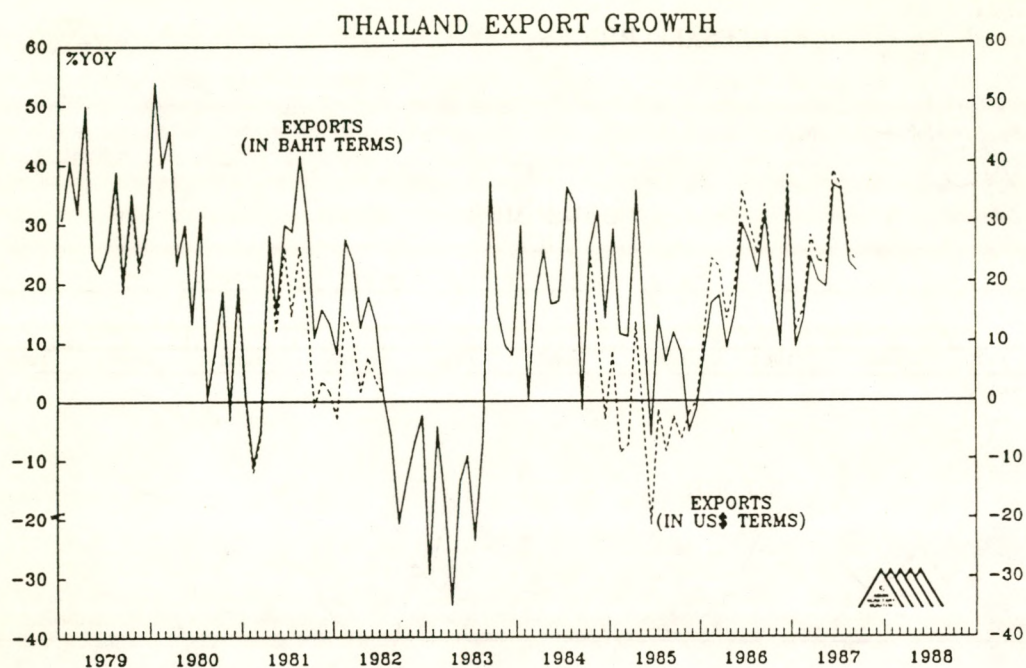
During 1988 the prospects for the Korean economy will be heavily geared to the performance of US domestic demand. Prospects for weaker US domestic demand have caused the Korean authorities to scale down their estimates for total export growth to 16%, against a 36% gain in 1987. Nevertheless, while this will lead to a narrowing of the trade surplus, the decline in the current account surplus is likely to be cushioned by a growth in service receipts in response to the influx of foreign visitors to the Olympic games. Initially, money growth is therefore unlikely to slow sharply, particularly if the Bank of Korea issues fewer monetary stabilisation bonds. Consequently, while fixed investment spending will be likely to slow in response to less buoyant export orders, consumption expenditure should remain strong.

However, there is a major risk of slower growth later in the year as the authorities tighten monetary policy in response to growing inflationary fears. By November the year-on-year increase in consumer prices had risen to 4.9% against only 1.2% at the beginning of 1987. With export orders slowing this could have a marked impact on economic growth. Consensus forecasts of 8% growth in real GNP therefore seem optimistic, after several years in which growth projections have erred on the side of caution.

S.KOREA MONEY, OUTPUT, TRADE AND PRICES



THAILAND: ANOTHER YEAR OF STRONG ECONOMIC GROWTH

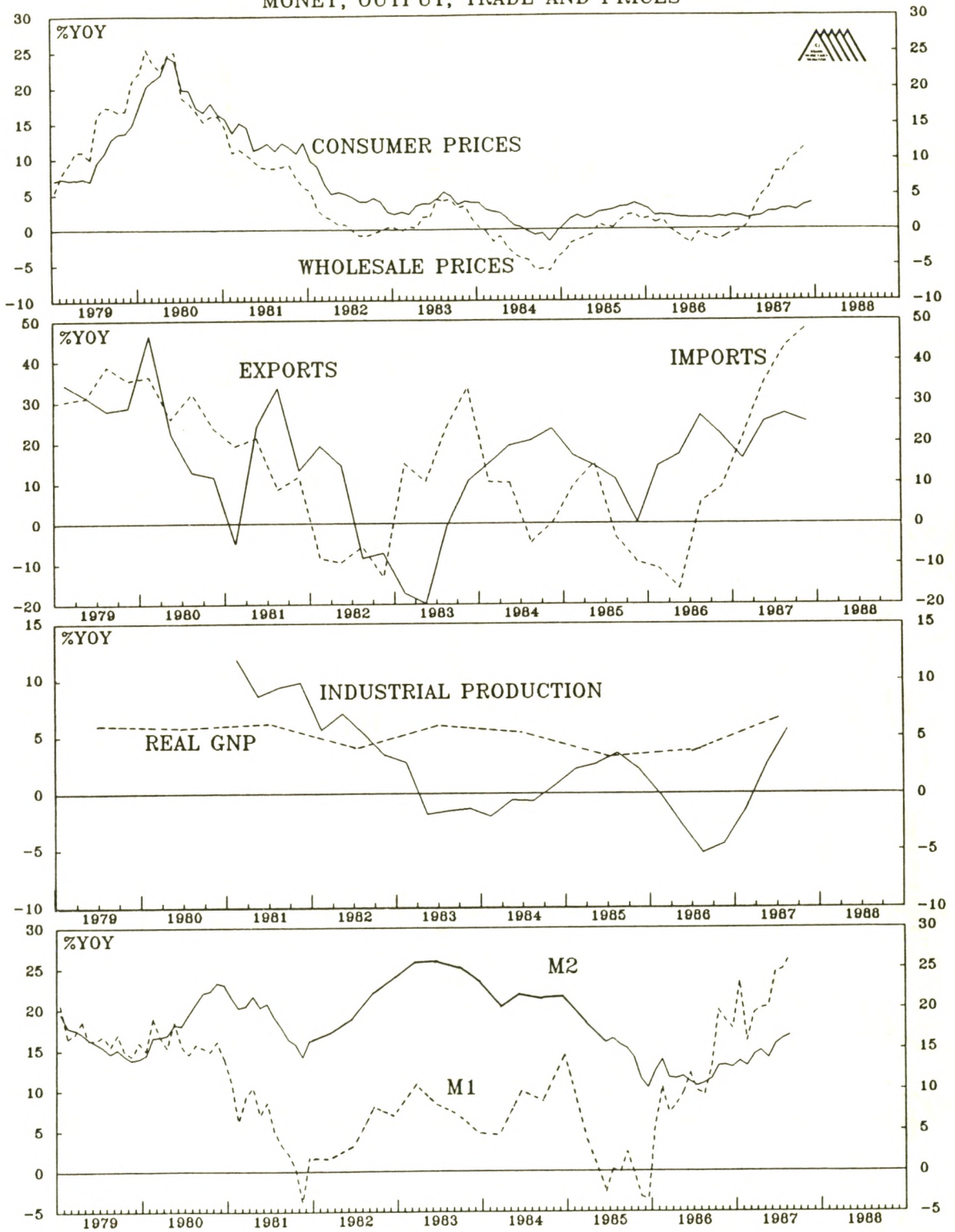


In 1988 Thailand looks set for another year of strong economic growth as it capitalises on the surge of foreign interest during 1987. Last year the economy grew by an estimated 6.6%, benefiting from buoyant tourist receipts and an acceleration in Japanese direct investment. Preliminary statistics show tourist arrivals up 20% over 1986 levels, while Japanese direct investment during the first nine months of the year totalled Baht 28.5 billion, three times as much as in the corresponding period a year earlier. As Thailand operates a fixed exchange rate regime, with the baht being held steady against a basket of currencies, the reserves of the banking system were substantially boosted.

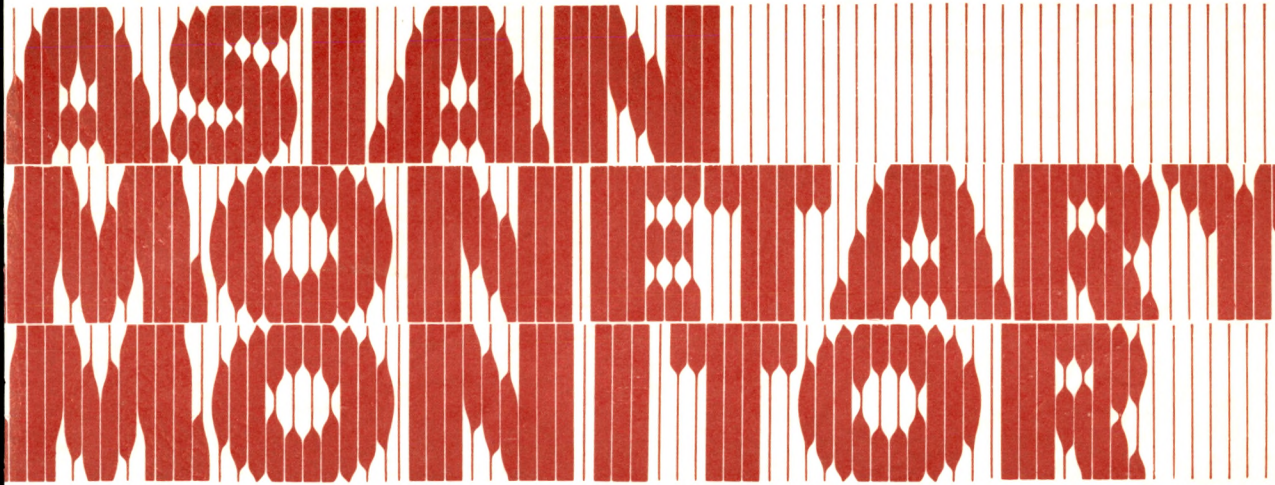
Initially, credit demand remained weak, rising by only 15% during the first half of the year in response to still low capacity utilisation levels. Short-term interest rates consequently fell but money growth failed to pick up. The 3 month interbank rate dropped from 7.5% to 6.5% and the minimum lending rate from 12.2% to 11.5%. However, later in the year these developments, along with stronger domestic and foreign demand, began to lead to a pickup in investment projects by Thai owned entities. Credit demand picked up and by the year end was growing at 30% per annum, while M1 was growing by 23.5% and M3 by 19%.

Apart from laying the groundwork for the continuation of the strong cyclical revival, last year's developments confirm the enhancement of Thailand's long-term productive potential. The nearly 38% gain in manufactured export earnings - largely a consequence of Japanese direct investment - underscores the economy's diversification away from the reliance on commodity exports, which led to an almost continuous deterioration in the terms of trade over the last decade. In addition, the direct investment flows should provide the country with a much needed technology transfer to boost productivity.

THAILAND MONEY, OUTPUT, TRADE AND PRICES





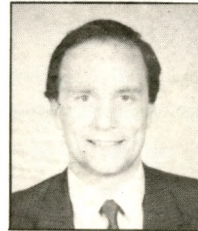


CONTENTS

	Page
PEOPLE'S REPUBLIC OF CHINA:	
China Emerges as an Important Pacific Trading Partner by Tim Lee	1
BOOK REVIEW:	
Hong Kong Economic Papers No. 17 (1986) Synopsis by Dr. Victor Mok	12
ECONOMIC CAPSULES:	
Australia: Bond Yields Tumble, but Monetary Policy Could Tighten	IPM 14
Hong Kong: As the Economy Turns, Liquidity Conditions Tighten	IPM 16
Japan: Private Capital Outflows Wane, Even as Trade Surplus Rises	TJL 18
Philippines: Exchange Rate Will Depreciate More Quickly	IPM 20
South Korea: A Lack of a Credible Anti-Inflation Strategy	IPM 22
Thailand: As Growth Accelerates Bottlenecks Begin to Emerge	IPM 24



John G. Greenwood
Publisher
Group Economist
G.T. Management PLC



Tim J. Lee
Editor
Economist
G.T. Management (Asia) Ltd.



Ian P. MacFarlane
Economist
G.T. Management (Asia) Ltd.



Daniel L. Gressel
Economist
G.T. Management (Asia) Ltd.



Sook Yee Li
Statistician



Michael Wong
Graphics



Isabella Ling
Administration

© ASIAN MONETARY MONITOR LTD., HONG KONG 1988

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the editor.

Asian Monetary Monitor is a bimonthly publication specialising in the analysis of economies along the Asian Pacific Rim. Sold by subscription only, price US\$200 p.a. inclusive of air mail delivery to any part of the world. Correspondence and subscriptions should be addressed to the Editor, Asian Monetary Monitor Ltd., GPO Box 12964, Hong Kong.

ASIAN MONETARY MONITOR

March - April, 1988

Vol. 12 No.2

PEOPLE'S REPUBLIC OF CHINA

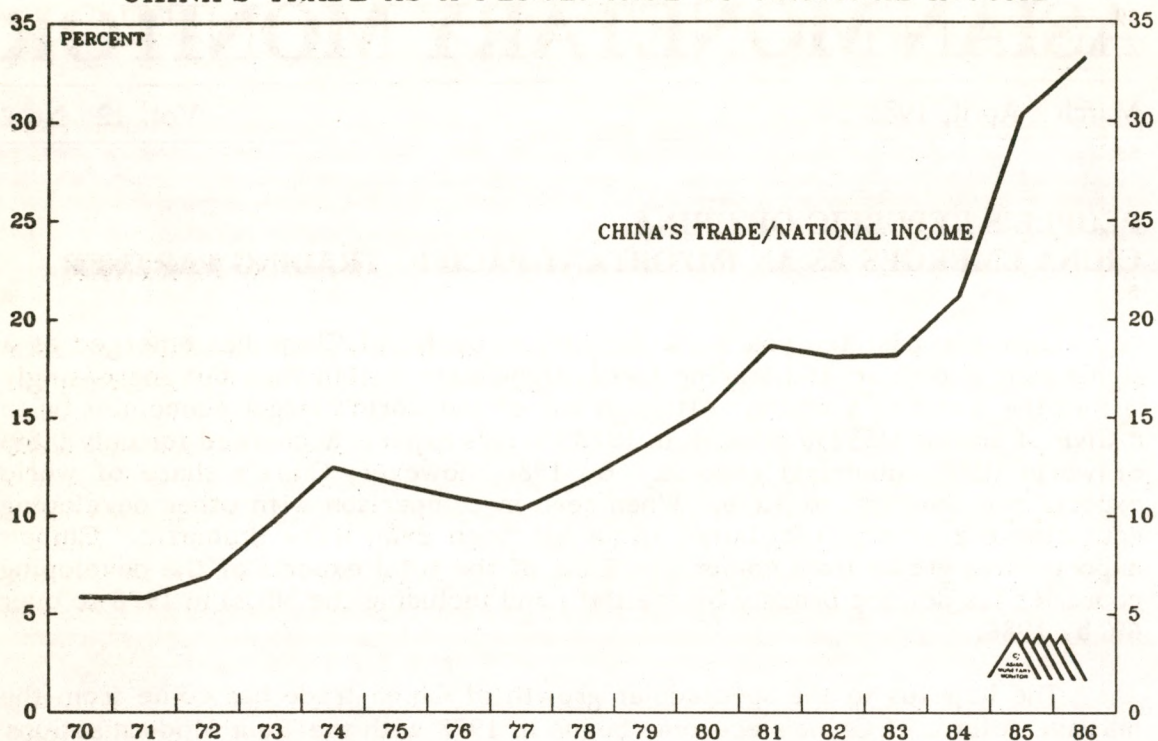
CHINA EMERGES AS AN IMPORTANT PACIFIC TRADING PARTNER

Over the past ten years the People's Republic of China has emerged as a significant economic and trading force, significant within Asia but increasingly within the world as a whole. Although one of the world's larger economies (with a GNP of around US\$250 billion), in 1978 China's exports accounted for only 0.8% of world (IMF countries) exports. By 1986, however, China's share of world exports had doubled, to 1.6%. When seen in comparison with other developing countries the growth of China's trade has been even more dramatic. China's exports have grown from comprising 2.8% of the total exports of the developing countries (as defined broadly by the IMF, and including the NICs) in 1978 to over 6% by 1986.

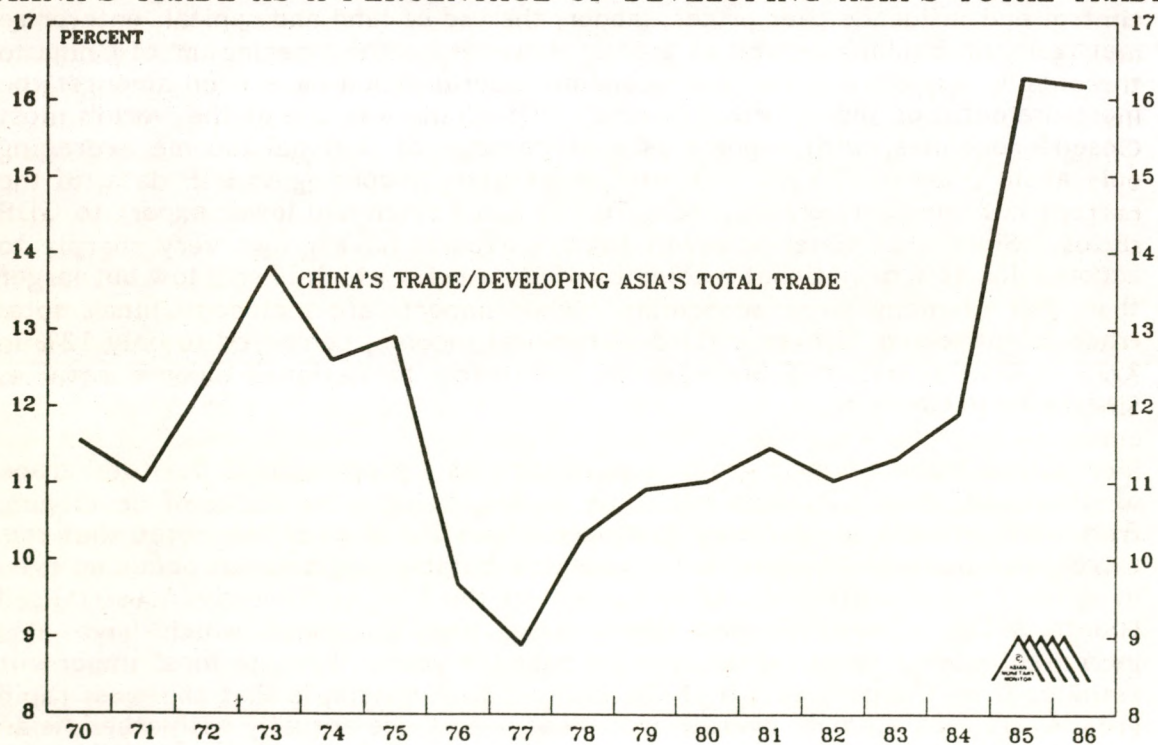
The impetus to the spectacular growth of China trade has come from the massive reform of China's economy begun in 1978 with the 'Four Modernisations' programme of December that year and continued with the October 1984 'Decision on the Reform of the Economic Structure' and other major reform initiatives since that time. Economic reform has been wide-ranging, covering every aspect of China's economy and involving a major reduction of government control and influence over prices, labour, the use of land and capital, enterprise management, banking as well as trade. However, in the 'opening up' of China to the outside world the effects of economic liberalisation have been amongst the most dramatic of the reform. Prior to 1979 China was one of the world's most closed economies, with exports as a percentage of national income averaging only about 5%-6%. To put this into perspective, according to IMF data, of the current IMF members only Uganda, Turkey and Yemen had lower export to GDP ratios. Since that time, however, China's exports have grown very sharply to account for 14% of national income by 1986, a ratio which is still low but larger than that of many large economies. When imports are included China's total trade is now equal to over a third of national income, compared to only 12% in 1979. This remarkable increase in the trade to national income ratio is illustrated in Chart 1.

China trade has also grown significantly as a proportion of the total trade of developing Asia (i.e. Asia excluding Japan), rising from 10.3% of developing Asia trade in 1978 to 16.2% by 1986 (see Chart 2). It should be noted that this increase in the proportion of Asian trade attributable to China has occurred even in spite of the phenomenal trading success of the four Asian newly industrialised countries (i.e. Korea, Taiwan, Hong Kong and Singapore) which have also increased exports several-fold over the past ten years. Perhaps most important to note, from the perspective of China's role within Asia, is that the most rapid growth area of China's overall trade has been trade actually with other Asian

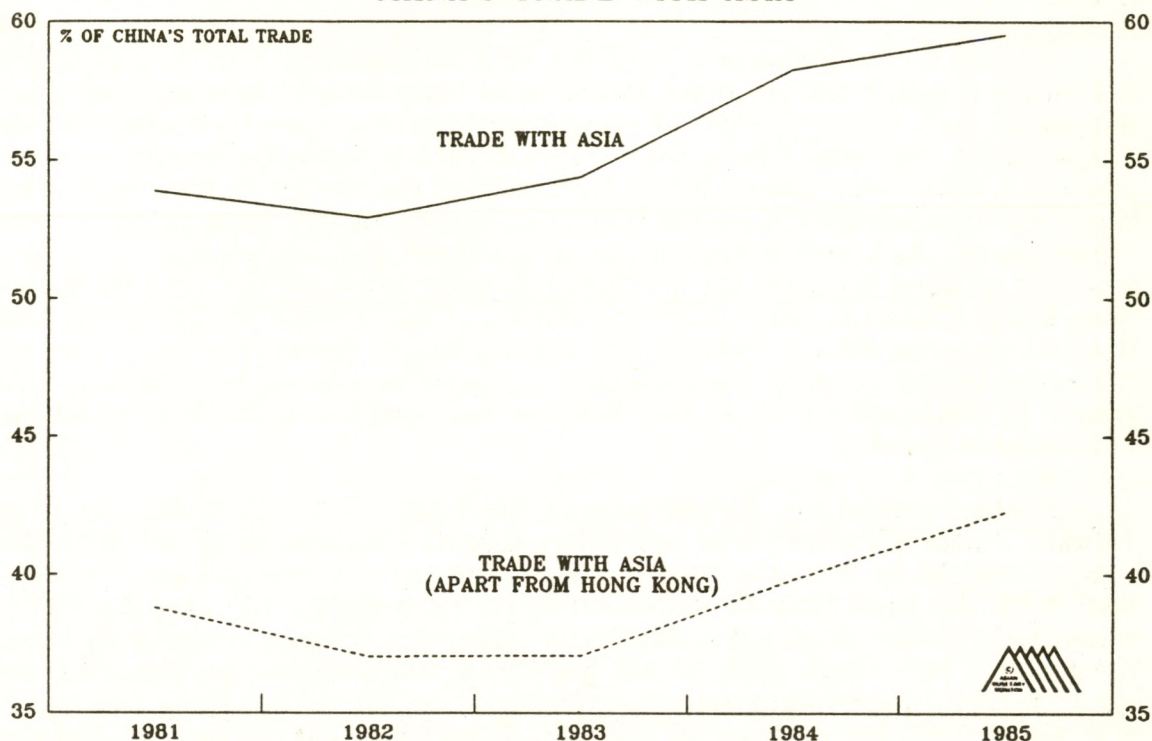
CHINA : CHART 1
CHINA'S TRADE AS A PERCENTAGE OF NATIONAL INCOME



CHINA : CHART 2
CHINA'S TRADE AS A PERCENTAGE OF DEVELOPING ASIA'S TOTAL TRADE



CHINA: CHART 3
CHINA'S TRADE WITH ASIA



countries. The PRC's total trade with other Asian countries has risen progressively over the last few years to account for as much as 60% of the PRC's total trade by 1985 (data for years more recent than 1985 is not available at the time of writing but when published will almost certainly show further acceleration in this trend). Admittedly, a large and growing part of China's trade (17% of total trade in 1985) is trade with Hong Kong. Much of this trade, in turn, is re-export trade where the final destination (or origin in the case of China's imports) of goods shipped is not necessarily within Asia. Nevertheless, even if all trade with Hong Kong is excluded, then China's direct trade with the rest of Asia, both absolutely and as a proportion of China's total trade, still shows a strongly rising trend (see Chart 3).

The boom in China's trade with Hong Kong has occurred for two major reasons. The first element is the port facilities in Hong Kong. In 1987 Hong Kong surpassed Rotterdam to become the largest container port in the world. Since there are no deepwater port facilities in southern China (a vast area encompassing some of the most rapidly growing regions in the P.R.C.), an increasing amount of the trade between this area of the PRC and the rest of the world passes through Hong Kong. The second element in the boom in China's trade with Hong Kong is Hong Kong's labour shortage and low wage rates in China, which have led Hong Kong manufacturers to shift production facilities over the border into China. The plentiful labour supply in China has allowed Hong Kong manufacturers considerable production flexibility and the enormous growth in the presence of Hong Kong manufacturers in southern China (it is estimated that well over a million workers are now employed by Hong Kong enterprises in China) has necessarily been accompanied by a rapid growth in

trade in components, semi-finished and finished products between Hong Kong and China.

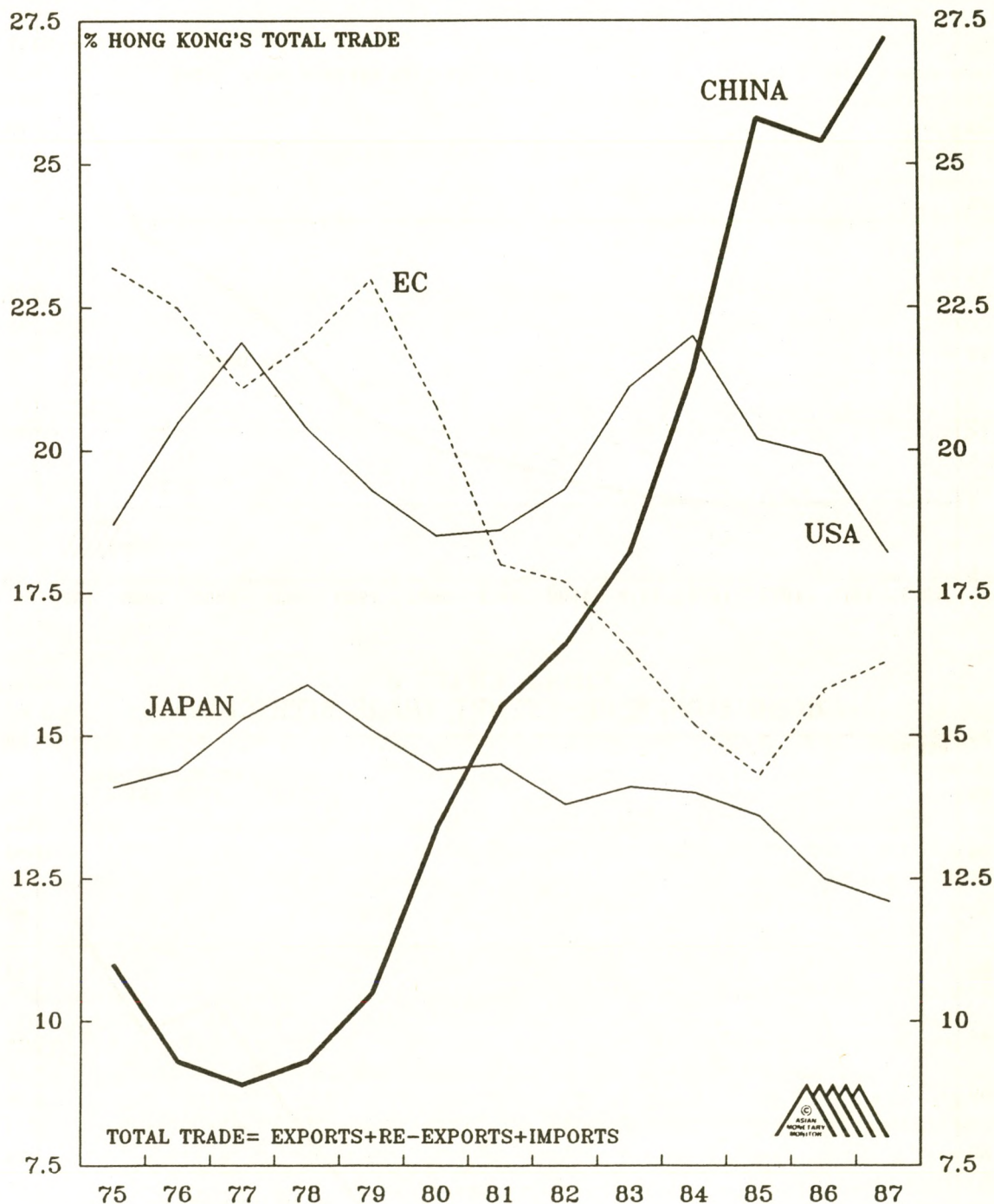
From Hong Kong's point of view the very rapid growth in trade with China has meant a major change in the structure of Hong Kong's trade over the past ten years. As a trading partner of Hong Kong China has risen from comparative insignificance (less than 10% of total trade) in 1978 to by far the territory's most important, accounting today for roughly a third of the territory's total trade (see Chart 4). It is worthwhile noting that by no means all this trade is merely re-export trade. As a purely domestic trading partner (i.e. considering only goods produced in Hong Kong for use in China and goods produced in China for use in Hong Kong) China has risen to become almost as important a trading partner to Hong Kong as the US. In 1987, 14.3% of Hong Kong's domestic exports were to China, while 17% of Hong Kong's retained imports originated from China. The growth in this domestic trade over the past ten years has been phenomenal, as illustrated in Chart 5.

Another interesting growth area of the PRC's trade has been that with Taiwan. Under Taiwan's 'three nos' policy (i.e. no contacts, no negotiations, no compromise) trade with the PRC is strictly illegal, but nevertheless Taiwan - PRC trade has been flourishing indirectly, via Hong Kong. As such, the PRC's trade with Taiwan is included within the statistics covering trade with Hong Kong, but a very rough guide to the growth in this trade can be gleaned from Hong Kong's trade statistics, by consideration of Hong Kong reexports originating from, and destined for, Taiwan. From Chart 7 it can be seen that the growth in Hong Kong's re-export trade with Taiwan has been particularly rapid over recent years. Clearly, not all of Hong Kong Taiwan re-export trade will be trade with China, but it is fair to assume that a large proportion, and most of the growth, is likely to be with China. As a very rough guide to potential orders of magnitude, Hong Kong's total re-export trade with Taiwan was equivalent to 3.6% of the PRC's total trade and 3.3% of Taiwan's total trade in 1987.

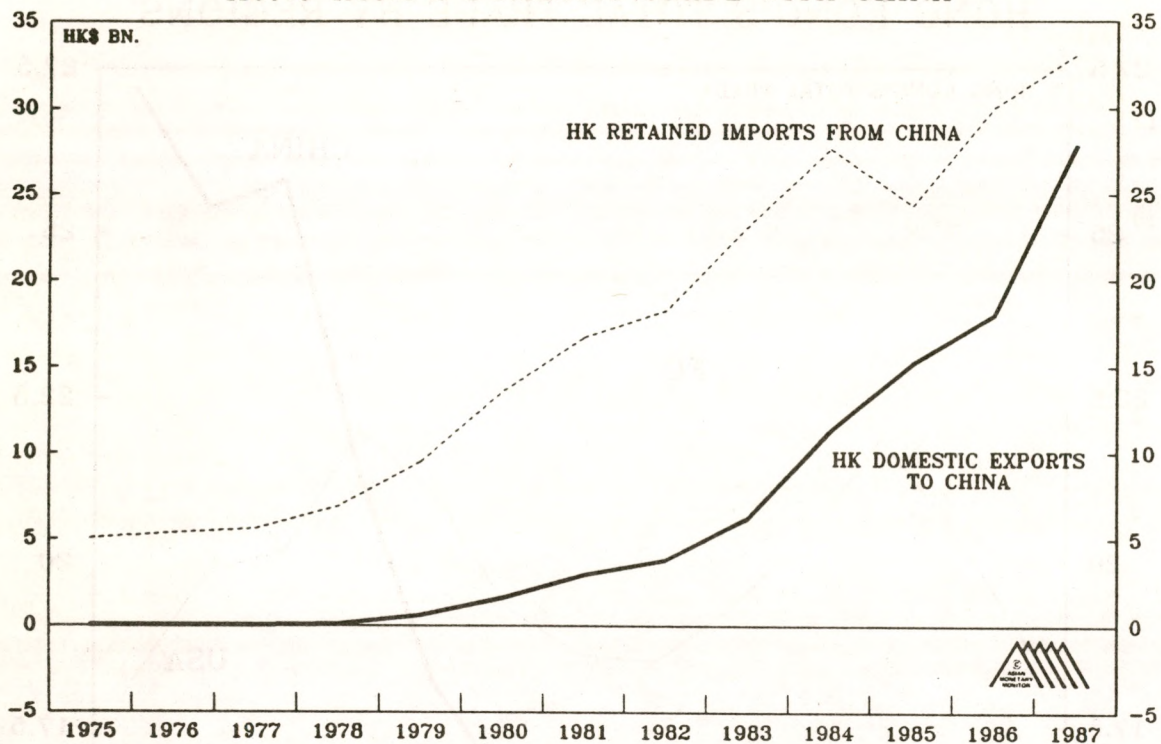
The fundamental force behind the explosion in China's external trade has, of course, been the reform of China's economy to a more market-oriented economy, ongoing over the past ten years. Initially the development of the four 'Special Economic Zones' (including Shenzhen, adjacent to Hong Kong) begun in 1980 (joined by fourteen coastal cities in 1984) played a large part in the growth of China's trade. The special economic zones, established initially to attract foreign investment and modern technology into export-related businesses, have attracted a significant amount of investment, particularly from Hong Kong. Since the groundwork for industrial reform was laid in the October 1984 'Decision on the Reform of the Economic Structure', however, the growth of trade has been more rapid as the effects of market-oriented reforms have permeated the whole Chinese economy. The spectacular growth of industrial output and incomes has naturally given rise to a greater need to trade, which has in turn been made possible by the greater autonomy which has been given to enterprises to trade on their own initiative.

Although the runaway growth and surge in imports which initially followed the October 1984 liberalisations led to a clampdown and re-centralisation of control over the use of foreign exchange in 1985-86, the recent trend has been towards greater liberalisation of foreign exchange controls. The current year

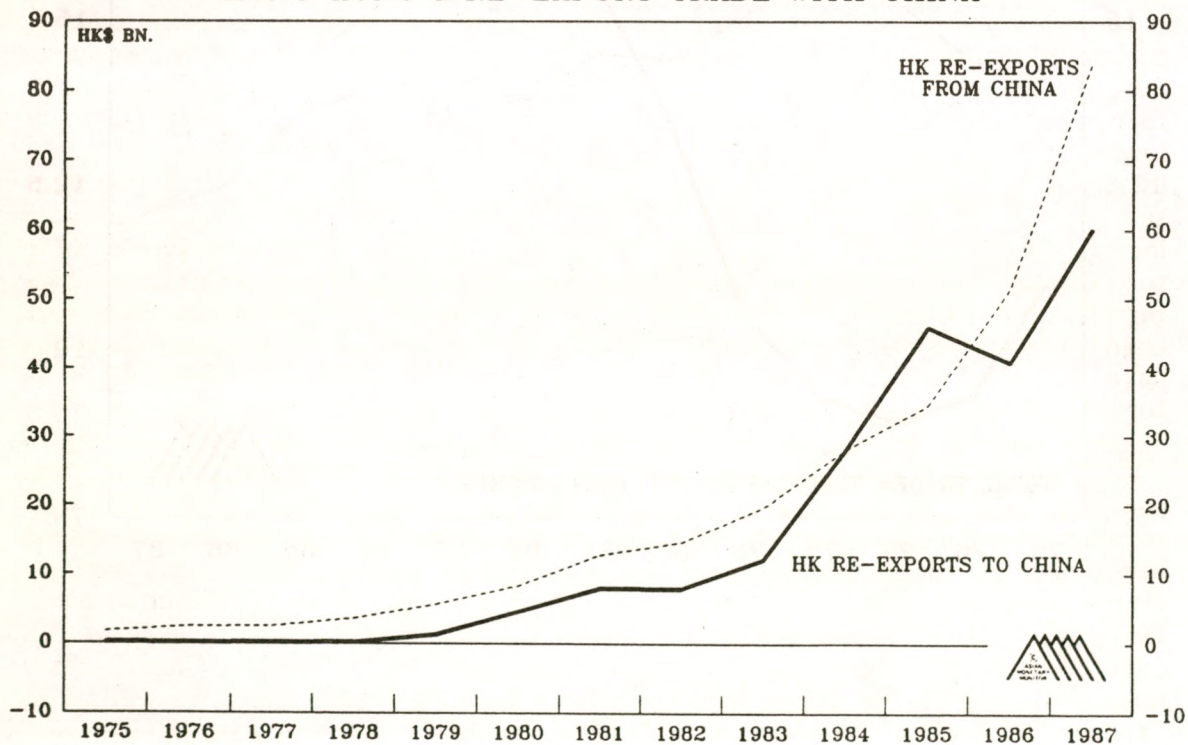
CHINA: CHART 4 HONG KONG'S TOTAL TRADE BY REGIONS



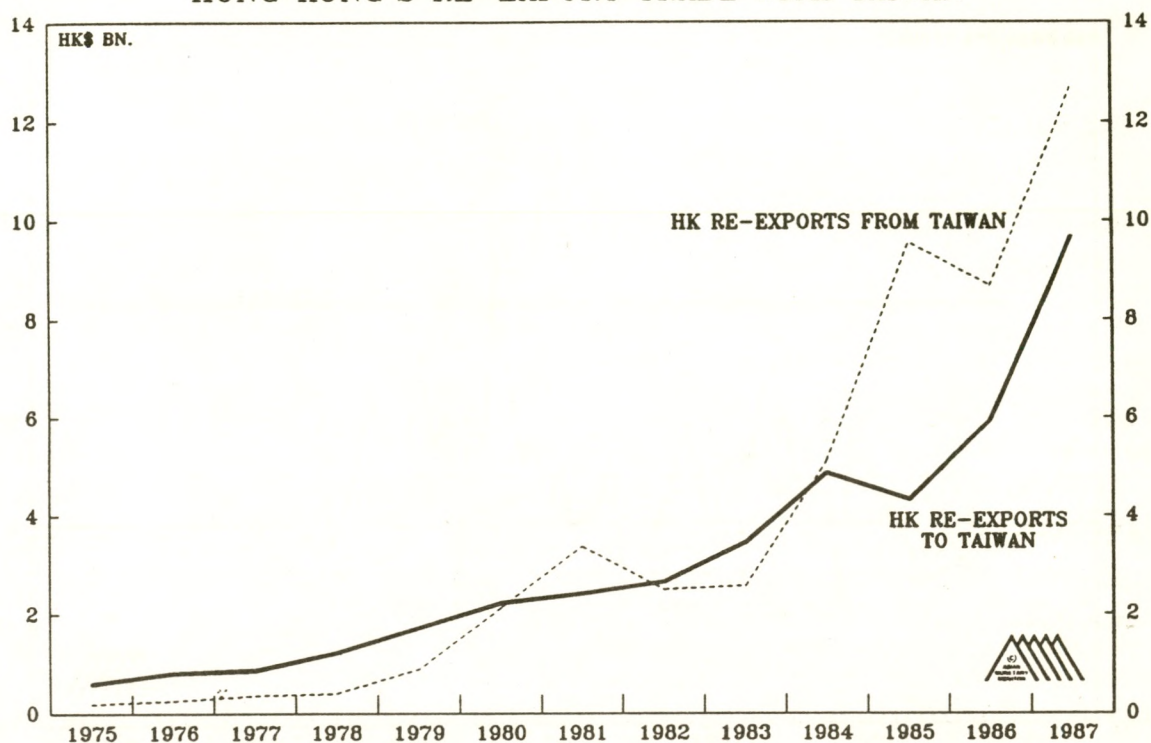
CHINA: CHART 5
HONG KONG'S DOMESTIC TRADE WITH CHINA



CHINA: CHART 6
HONG KONG'S RE-EXPORT TRADE WITH CHINA



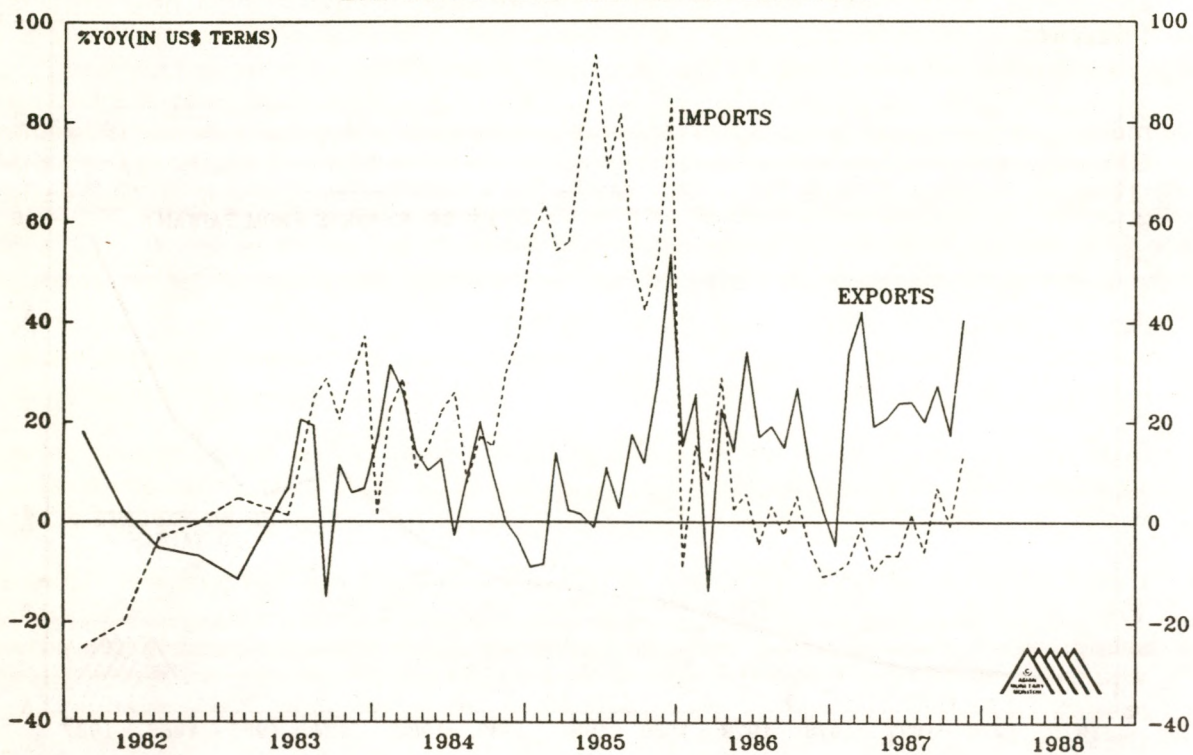
CHINA: CHART 7
HONG KONG'S RE-EXPORT TRADE WITH TAIWAN



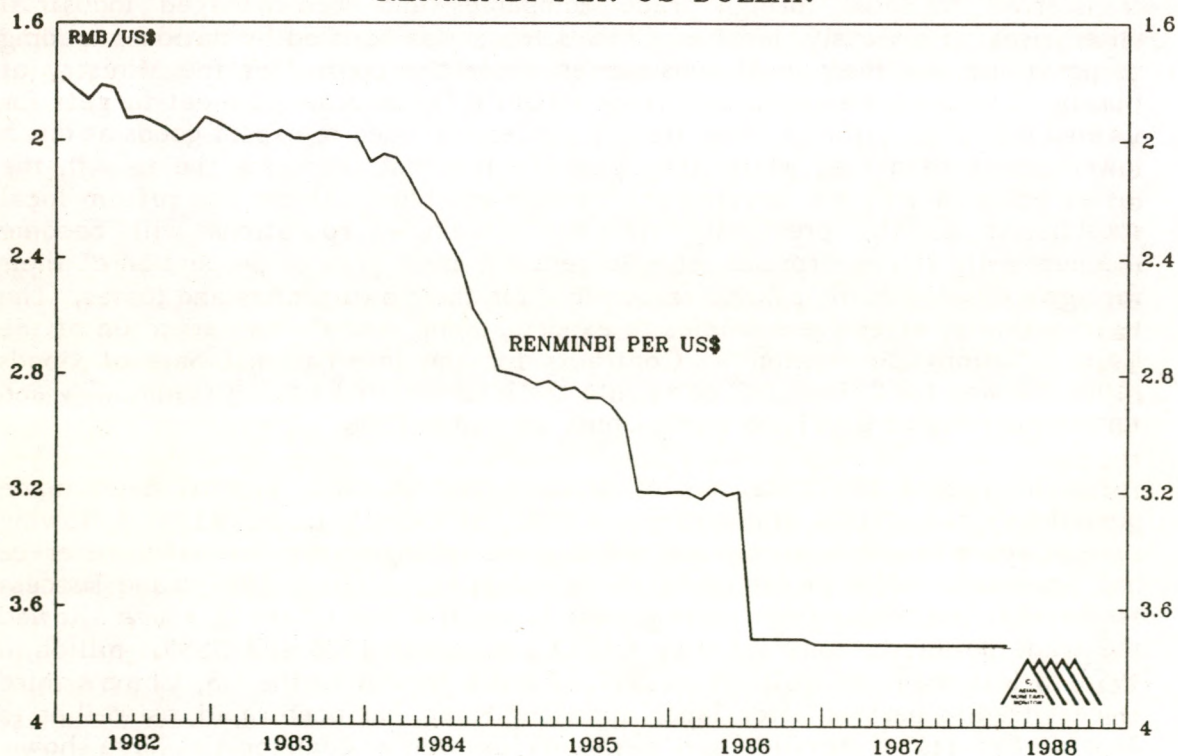
has seen major reforms in foreign trade under which foreign trade has been radically decentralised, with the power to handle most exports and imports being transferred to local foreign trade companies and well-managed industrial enterprises. Previously, most of China's trade was handled by national trading corporations and their local subsidiaries under the control of the Ministry of Foreign Economic Relations and Trade (MOFERT). In order to meet targets for foreign exchange earnings these trading concerns tended to export goods at much lower prices than that which they paid the manufacturers for them, with the losses being met by the government through subsidies. Under the reform local subsidiaries of the previously state-run trading corporations will become independently run enterprises, able to retain a much greater proportion of their foreign exchange earnings, and responsible for their own profits and losses. The termination of effective subsidies to exports, along with China's adoption of the United Nations Convention on Contracts for the International Sale of Goods paves the way for China's full entry into the international trading community and for membership of GATT, to which China applied in 1986.

The recent liberalisations of trade have, to some extent, been made possible by the virtual elimination, in 1987, of China's trade deficit following several years in which large trade deficits and falling foreign exchange reserves had presented major problems to the authorities. China's 1987 trade success stemmed in particular from rapid growth in exports (see Chart 8), which allowed the trade deficit to contract from US\$13.1 billion in 1985 and US\$9.1 billion in 1986 to less than US\$4 billion in 1987. Export growth to the US, China's third largest trading partner after Japan and Hong Kong, has been rapid, as well as to Japan. Exports of textiles and garments as well as commodities have shown

CHINA: CHART 8
EXPORTS AND IMPORTS GROWTH



CHINA: CHART 9
RENMINBI PER US DOLLAR



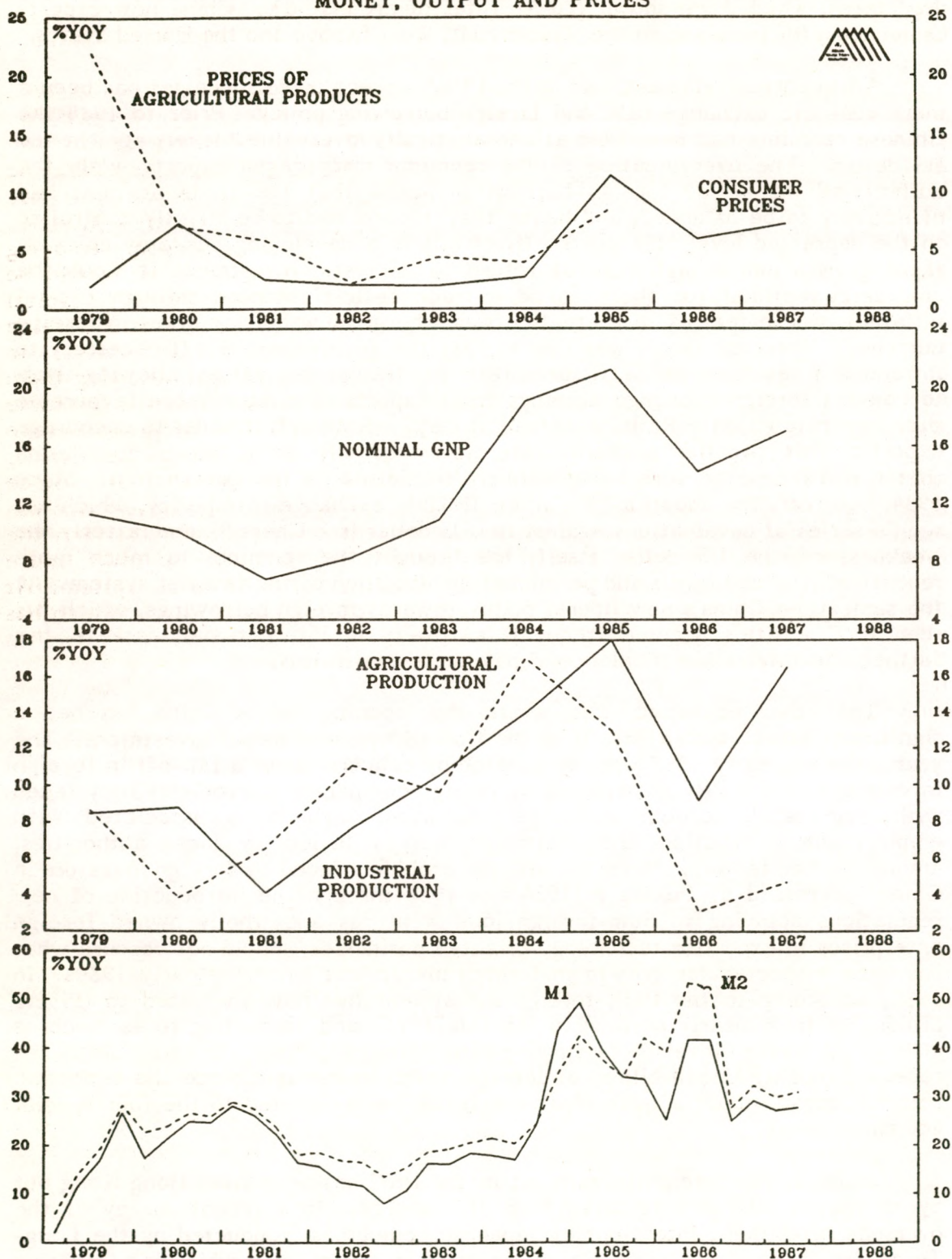
particularly good growth, but also goods such as machinery and electrical appliances, which have shown growth rates of around 50%. China now exports televisions, for instance, to the Middle East, West Europe and the United States.

An important element behind the PRC's recent trade successes has been a more realistic exchange rate and foreign borrowing policy. Prior to 1984 the Chinese renminbi had been held at unrealistically 'overvalued' levels against the US dollar. The overvaluation of the renminbi discouraged exports while the authorities' dislike of foreign borrowing meant that the trade account had effectively to be balanced, and hence that imports had to be strictly controlled to the depressed level of exports. (Normally in a developing economy enjoying rapid growth and a high rate of return to domestic investment it would be considered optimal for there to be a trade deficit financed through capital inflows.) One effect of this situation was a burgeoning black market in foreign currency. A second result was that in 1981 the government felt it necessary to introduce a new 'internal settlement rate' for trading companies, allowing them to convert foreign exchange earnings from exports at a much more favourable exchange rate (US\$1 = RMB2.8 instead of US\$1 = RMB 1.7) in order to encourage exports. This 'two tier' exchange rate system quickly led to foreign complaints that China's exports were being unfairly subsidised by the government. Since 1984, however, the adoption of a more flexible exchange rate policy, which has seen a series of devaluations against the US dollar (see Chart 9), and latterly the weakness of the US dollar itself, has brought the renminbi to much more realistically valued levels and permitted the abolition of the two tier system. At the same time China's new liberal policy towards foreign borrowings, which has seen PRC entities become frequent borrowers in international markets, has further alleviated China's balance of payments constraints.

The other economic area where the 'opening up' of China has had a significant effect within Asia is in the flow of overseas direct investment. The year 1986 and early 1987 were dominated by concern about a fall-off in foreign investment in the PRC, attributed by foreign companies to problems they faced with 'red tape', foreign exchange shortages, high costs associated with employment, corruption and arbitrary charges levied by local authorities, amongst other factors. Nevertheless, the problems faced by foreign investors in China, addressed by Peking in 1986 and 1987 through the introduction of new regulations applying to Sino-foreign joint ventures and wholly owned foreign enterprises in export or technology-oriented businesses, should not obscure what has been a spectacular growth in foreign investment since the early 1980s. In 1986, according to the IMF, foreign investment in China amounted to US\$2.2 billion, up from nearly nothing in the late 1970s and amounting to as much as 40% of all foreign investment flowing into developing Asia. In total China has received roughly US\$10 billion of foreign direct investment since the economic reforms began, about a quarter of which has been directed to the four special economic zones.

Much of the foreign investment in the PRC has been from Hong Kong but by no means all has originated from this source. In a recent survey of the overseas investment intentions of Japanese companies, conducted by the Long-Term Credit Bank of Japan, China emerged as the country which is attracting the greatest increase in interest as a potential investment area for Japanese companies. Particularly significant was that 9.1% of the non-manufacturing

CHINA: CHART 10
MONEY, OUTPUT AND PRICES



companies surveyed (particularly including construction companies and department stores) responded that they intend to have production footholds in China in the future compared to the 6% that already have footholds in China.

A perhaps less well-known and recent aspect of China's entry into the world economy has been a sharp surge in investment outside China by PRC entities i.e. China's direct investment overseas. This was particularly significant in 1987, when China set up 124 firms overseas with a total capital of US\$1.3 billion, US\$350 million of which was contributed by the Chinese entities themselves. Overseas investment by Chinese companies began in 1979, but has only become significant in recent years, reflecting the increasing sophistication of management of many Chinese concerns.

It is undoubtedly true that the emergence of China on the world economic scene, first as a trading power and recipient of direct investment and latterly as an overseas investor itself, has been the most important feature of Asian economic developments over the past ten years. The ascendancy of the reform-minded Party General Secretary Zhao Ziyang to the leadership of China and the strong commitment to continued economic liberalisation made at the most recent National Party Congress (in October) appear to ensure that the rapid growth of the Chinese economy is set to continue over the longer term. In addition, the recent effort to improve the regulations governing foreign investment and the ongoing trade reform should create an environment more conducive to trade. It appears likely that into the next century China will become increasingly hard to ignore as a force in world trade and economic affairs. In this respect it is worthwhile to note that sheer population size means that if China achieves its goal of reaching a per capita GNP of US\$800 by early next century (similar to that of Thailand at the present) then China will become almost as large an economy as West Germany is now.

BOOK REVIEW

HONG KONG ECONOMIC PAPERS NO. 17 (1986)

Serial Publication No. 17 of the Hong Kong Economic Association

Synopsis prepared by Dr. Victor Mok, Chinese University of Hong Kong

In this issue there are two papers on monetary matters, one paper on the productivity of research organizations, four papers on various controversial issues in Hong Kong, namely land sales, electronic road pricing and electricity pricing, and three symposium papers on Hong Kong's economic growth.

The paper by Sir John Hicks, entitled 'Abdication from Money', traces the development of the international monetary system and stresses the role that gold or sterling played as international money before 1914, and the emergence of the US dollar as international money in the post-1944 Bretton Woods system. Upon the breakdown of the Bretton Woods system in 1971, however, the US government effectively caused the dollar to abdicate from its position as an international money, according to Sir John. Just as gold and silver became acceptable as international money in the past to meet the needs of international trade, so he implies, the exigencies of international trade will create the need for a new international money. However, in the interim, since no such international money has yet been created, America has been able to maintain fairly full employment, public expenditure not covered by taxes, and a large balance of payments deficit covered by an enormous movement of funds towards the United States. This result would have been impossible under the constraints of a genuine international money, but under present arrangements could only occur because America's creditors had no option but to keep their money in dollars. Sir John's paper was written at a time when the US dollar was strong, but it seems no less relevant in these days of dollar weakness.

Shu-Ki Tsang's paper deals with money-income causality in South Korea, using Granger-causality tests. Both the direct Granger and the Sims approaches suggest that there is a strong form of causality running from money to income rather than the other way round. To those who equate under-development of the financial sector in an open economy with passive monetary changes, the conclusion that money is exogenous may be somewhat surprising.

In a model utilizing patent statistics, Ben T. Yu compares the productivity of inventors in emerging organizations in the US petroleum industry between 1861 and 1938. It is found that superior inventors do have a tendency to sort themselves into large research organizations. This result bears against the commonly held view that technical advances arise more often from small and independent concerns, and is consistent with the explanation that a research organisation is formed to capture the returns from nonpatentable research.

Government land sales by auction in Hong Kong are often taken as evidence of a high land price policy. As an alternative, C.L. Wu's paper proposes to use the 'simulated oral bidding' method, i.e., in sealed bidding land is sold to the highest bidder at the second highest bid price. This can help combat the

simple-minded belief of a high land price policy and solve the allocative efficiency problem implicit in sealed bidding.

The proposed (now dropped) electronic road pricing scheme in Hong Kong has aroused much controversy. From a theoretical point of view, Lok-Sang Ho's paper argues in favor of a time-based scheme. It is argued that in the short run road pricing enables more efficient use of existing roads and in the long run a properly priced transportation system will lead to better use of land and resources. But there are many practical issues related to the necessity, feasibility and effectiveness of the scheme. Admitting that it is more flexible and direct in tackling traffic congestion at a particular location and time, Peter K.W. Fong's paper argues against the implementation of the scheme at this stage since existing measures such as road improvement and restraints on car ownership are performing adequately in easing traffic congestion.

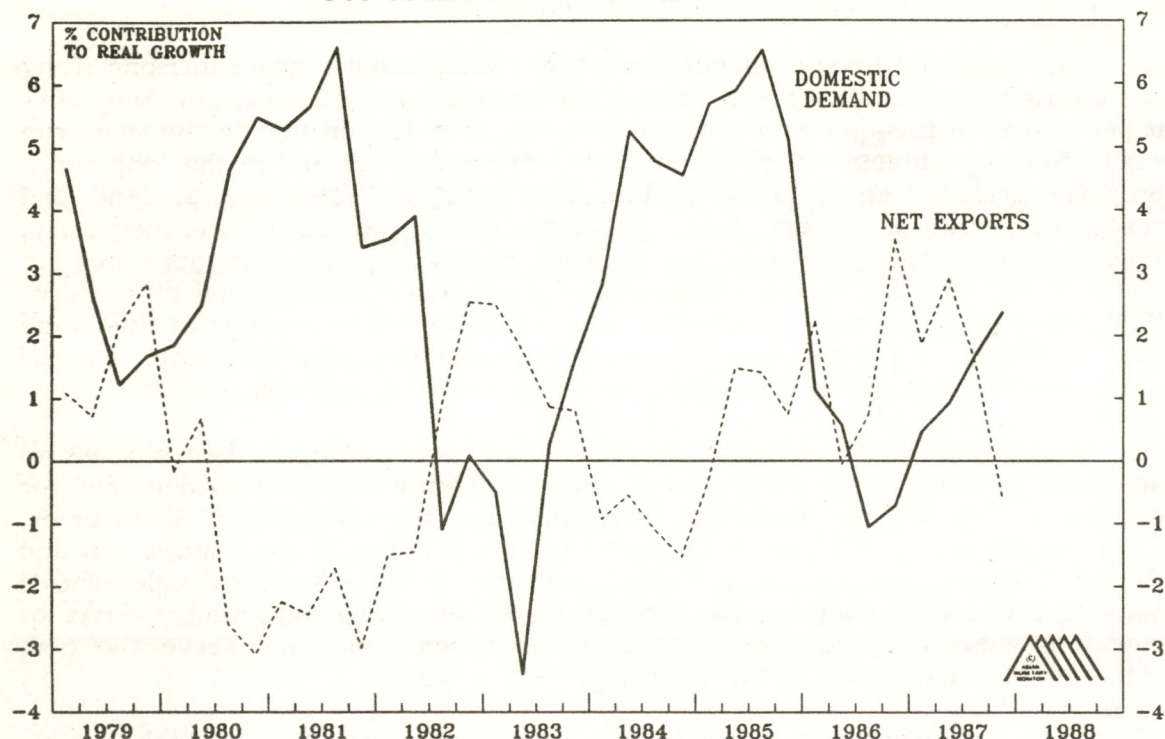
According to the Schemes of Control which regulate the two electricity suppliers in Hong Kong, expansion of capacity to meet additional demands for electricity is to be financed internally by the companies themselves. Commenting on the Scheme of Control Agreement between the China Light and Power Company and the Hong Kong Government, Brian Kantor's paper shows that it produces higher tariffs for consumers than the opportunity costs of supplying electricity to them, and that the Scheme may not serve the best interests of shareholders of the Company.

In a symposium on the economic growth of Hong Kong, Stephen K.C. Cheung, an industrialist, stresses the importance of low direct taxation, stable and consistent policies, and the rule of law in Hong Kong's past development. He warns that political agitation for more representative government might adversely affect the low tax policy. A.A. McLean from the government emphasizes the emerging relation between Hong Kong and China and believes that prospects will remain good provided Hong Kong continues to adopt pragmatic policies. S.H. Tang, an academic, thinks that the government should adopt counter-cyclical fiscal policies and use tax measures to promote industrial restructuring. The establishment of a 'Science and Technology Research Council' is also suggested.

The Hong Kong Economic Papers is an annual publication of the Hong Kong Economic Association. The price of a single copy is HK\$40.00 in Hong Kong and US\$9.00 abroad (including overseas postage). Copies may be obtained from leading booksellers or from the publishers, Shun Po Co. Ltd., North Point Industrial Building, 4/F, Block A, 499 King's Road, North Point, Hong Kong.

AUSTRALIA: BOND YIELDS TUMBLE, BUT MONETARY POLICY COULD TIGHTEN

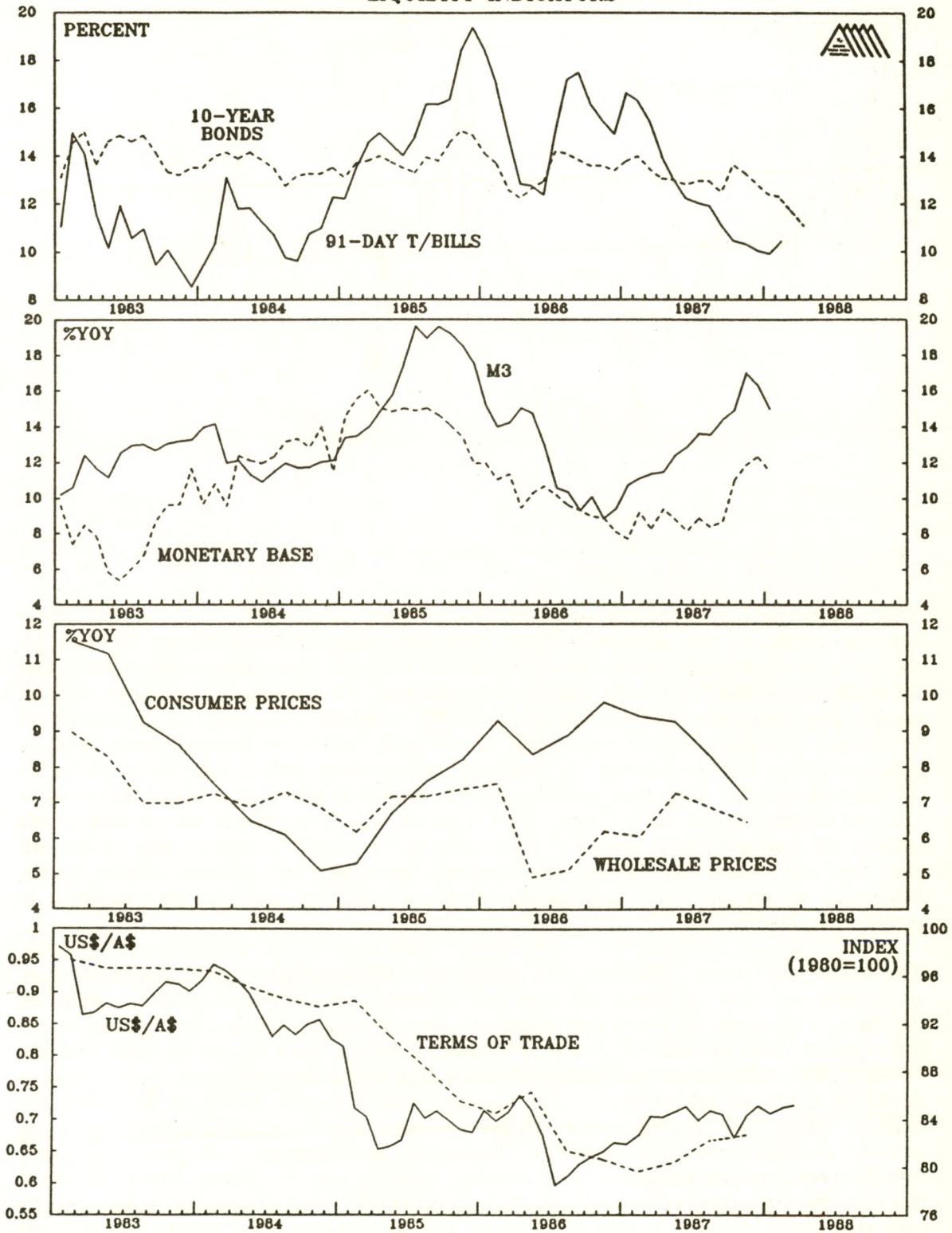
AUSTRALIA CONTRIBUTION TO REAL GROWTH



The strong rally in the Australian bond market is continuing. The yield on 10 year Commonwealth bonds has fallen from 13% immediately after the stockmarket crash to 12.5% at the beginning of the year and 11.6% in late April. The major causes of the rally have been the continued fall in inflation, an underlying improvement in the current account, and a very tight fiscal policy which has resulted in an expected budget surplus in excess of A\$1 billion in fiscal 1987/8 and an announcement that approximately A\$3.0 billion of Commonwealth debt will be retired in fiscal 1987/8 and 1988/9. These factors have been reinforced by growing foreign interest in Australian bonds in the wake of strengthening commodity prices, which have brought renewed confidence in the Australian dollar.

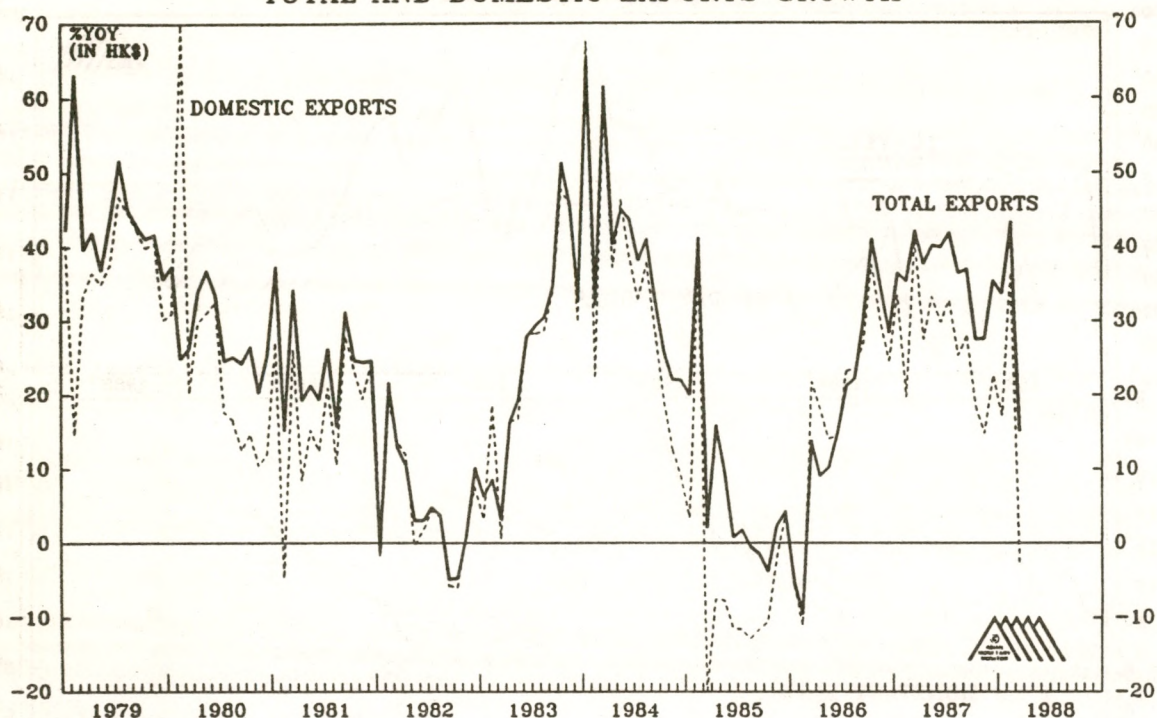
However, the current conduct of economic policy is a cause for concern. The Australian authorities are placing inordinate emphasis on fiscal policy as a tool of demand management and virtually ignoring monetary policy. Consequently as a result of easy monetary conditions domestic demand remains very strong, while net exports are falling. At present the lower cost of financing Australia's foreign debt in Australian dollar terms and improving commodity prices are dwarfing the negative impact on Australia's current account, which is continuing to show an improvement. But if commodity prices fail to climb at the same rate as over the last six months, and either hold at current levels or fall, Australia remains very vulnerable. In addition, the improvement in the current account has not yet reached levels which would be consistent with maintaining Australia's external debt at a constant fraction of GNP over the longer term. A precautionary tightening of monetary policy is therefore likely before long, with the yield curve flattening as rates at the shorter end edge up.

AUSTRALIA LIQUIDITY INDICATORS



HONG KONG: AS THE ECONOMY TURNS, LIQUIDITY CONDITIONS TIGHTEN

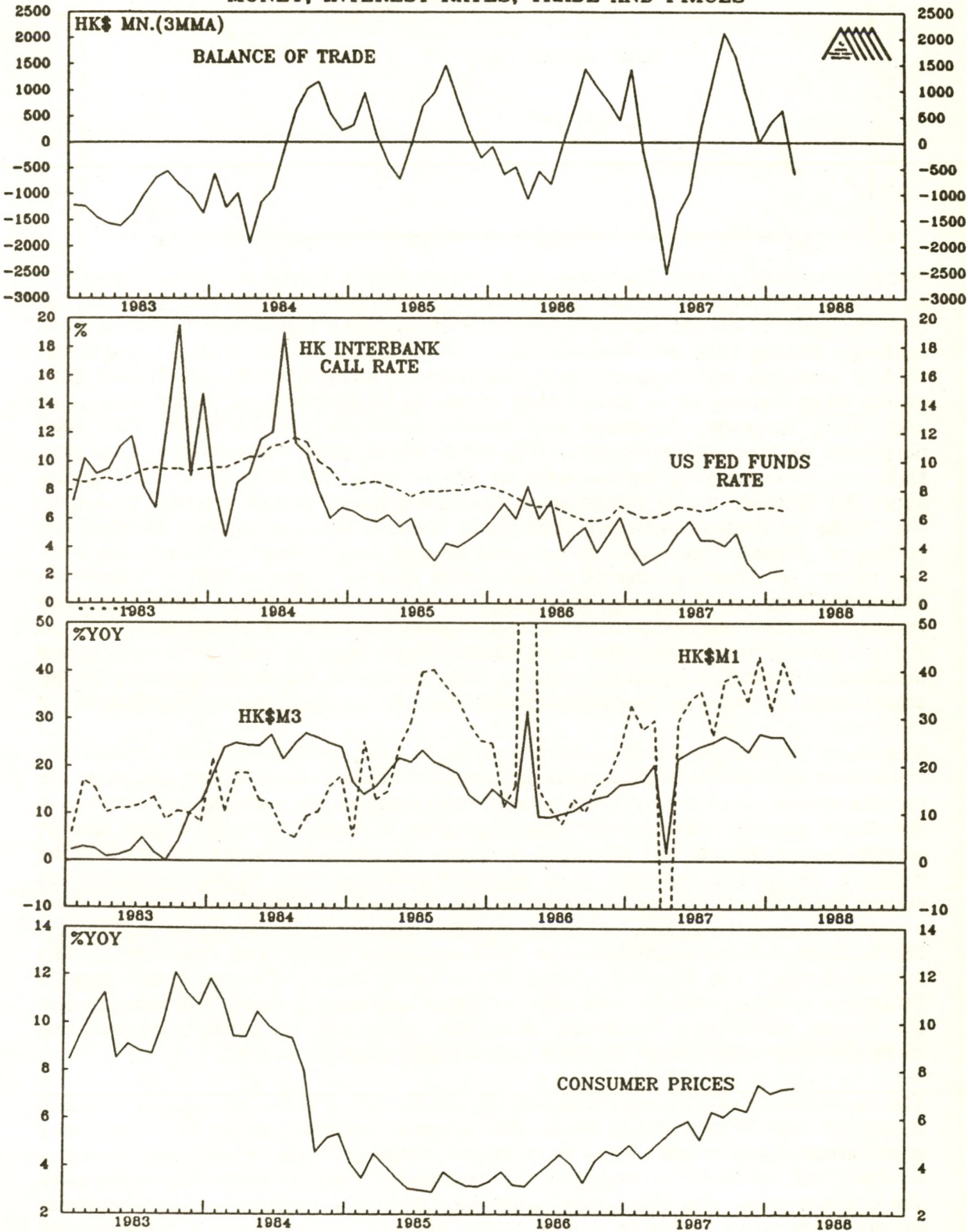
HONG KONG TOTAL AND DOMESTIC EXPORTS GROWTH



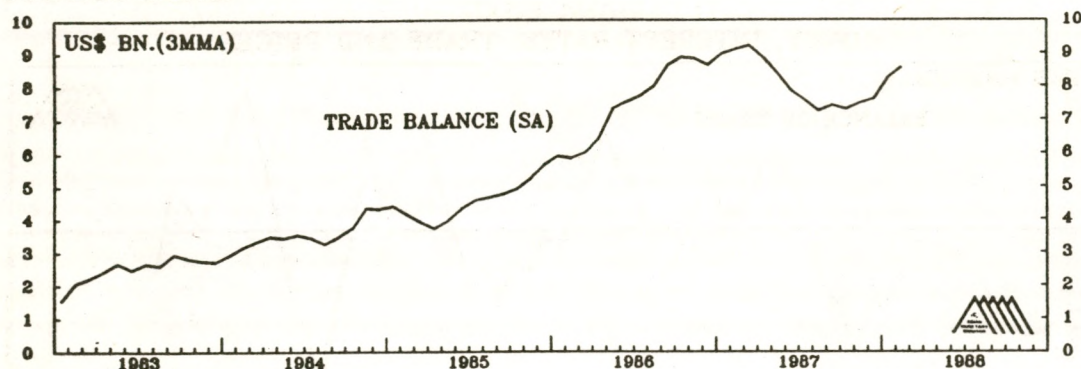
There is mounting evidence that the Hong Kong economy has passed the upper turning point of the business cycle and that liquidity will begin to tighten. Export growth has begun to slow, the trade account has swung into deficit and inflation is accelerating. In the first quarter of 1988 domestic exports rose by 14.6% year-on-year, well down on the 27% increase recorded in the whole of 1987, the trade deficit deteriorated to HK\$1.8 billion, compared with a small surplus in the fourth quarter of 1987, while consumer prices rose by 7.3% year-on-year in March. Inflation would probably have been higher by now were it not for the depreciation of the Renminbi against the Hong Kong dollar which has helped to contain food prices. However, with the rate of growth of output slowing and wage increases accelerating in response to very tight labour markets, unit wage costs and consumer price inflation can also be expected to accelerate further.

The impact of these developments on liquidity trends has been reinforced by an unwinding of the speculative capital inflows, which reached their peak in January, following on from the threat of the negative interest rate scheme and the firmer tone of the US dollar. Interbank rates have begun to firm and the Hong Kong Association of Banks adjusted the prime lending rate upwards from 6.0% to 6.5% in early April. The latest money supply numbers (HK\$M3) for March, show that year-on-year HK\$M3 growth fell to 22.1%, after remaining steady at just over 26% between December and February despite the heavy speculative capital inflows. The coming months are therefore likely to see a further deceleration in money growth, unless the US dollar weakens substantially and there is a marked intensification in speculative pressure on the Hong Kong dollar. Short-term interest rates are also likely to continue to trend back to US levels.

HONG KONG MONEY, INTEREST RATES, TRADE AND PRICES



JAPAN: PRIVATE CAPITAL OUTFLOWS WANE, EVEN AS TRADE SURPLUS RISES

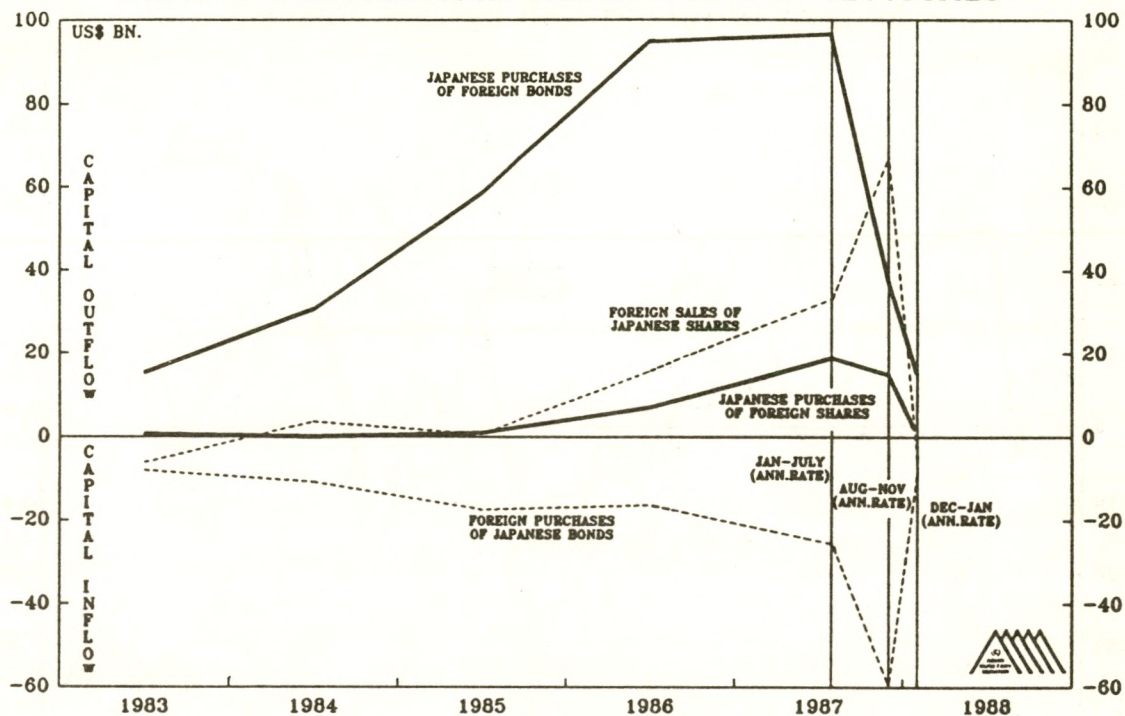


Notwithstanding strong Japanese direct investment overseas, total long-term private capital outflows from Japan have fallen away sharply this year as the underlying level of net portfolio investment outflows has diminished to almost nothing. During 1986 and January-July 1987 the major element in net long-term capital outflows was Japanese net purchases of foreign bonds, which over that period were running at an annual rate of nearly US\$100 billion. Since August of last year, however, Japanese institutions have sharply curtailed their net purchases of foreign (particularly US) bonds which, as a consequence, have now fallen to an underlying annual level of around only US\$20 billion. During and after the October world stockmarket crash, the major capital outflow financing the trade imbalance between Japan and the US became instead foreign net selling of Japanese equities, as between August and November foreigners were net sellers of Japanese shares at an annual rate of close to US\$70 billion (an enormous amount). During this year, however, this capital flow has been completely reversed, as foreigners have become net buyers of Japanese shares. At the same time Japanese institutions have also moved to reduce their purchases of foreign equities, meaning that the three major components of the capital outflow in securities transactions have all but disappeared (see Chart).

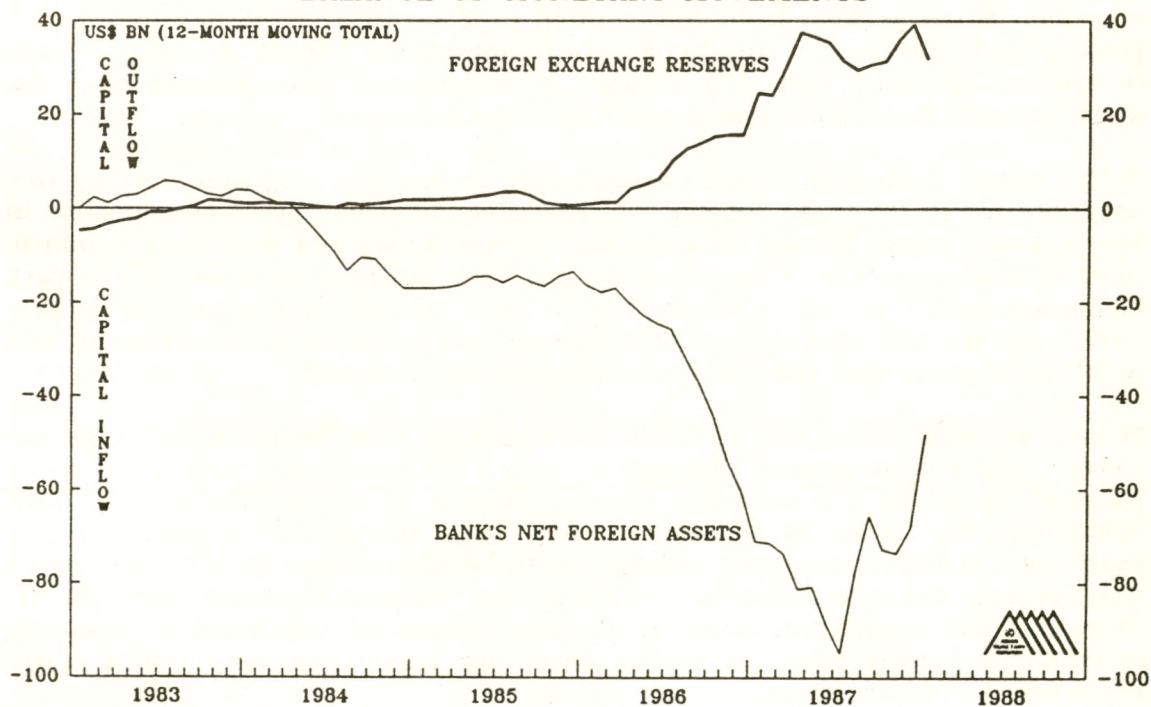
The sharp decline in the long-term private capital outflow has occurred at the same time as Japan's trade surplus has actually stopped contracting and begun to trend upwards. Japanese import growth has remained very strong but the rise in the trade surplus has resulted from a pick-up in export values, largely due to higher export prices, but also due to some recovery in export volumes. The rising trade surplus together with declining non-monetary capital outflows has meant that Japan's overall balance of payments (i.e. the sum of all non-bank external transactions) has, in recent months, tended to be in surplus in contrast to the huge deficits experienced in 1986 and early 1987. The financing of this surplus through the banking system has occurred partly through heavy foreign exchange interventions by the Bank of Japan and partly through a reduction in the capital inflow to commercial banks, the latter possibly reflecting unwinding of short-dollar positions in the forward foreign exchange market.

The coincidence of a rising trade surplus and declining non-bank capital outflows is not sustainable in the long-term. As Japanese monetary policy is already very expansionary and import growth is anyway rapid, it seems unlikely that this problem will be solved through further easing in Japanese monetary conditions. Thus, ultimately, the imbalance must be corrected through weaker Japanese exports, which will require either lower demand overseas, or a stronger yen which could also have the effect of encouraging private capital outflows.

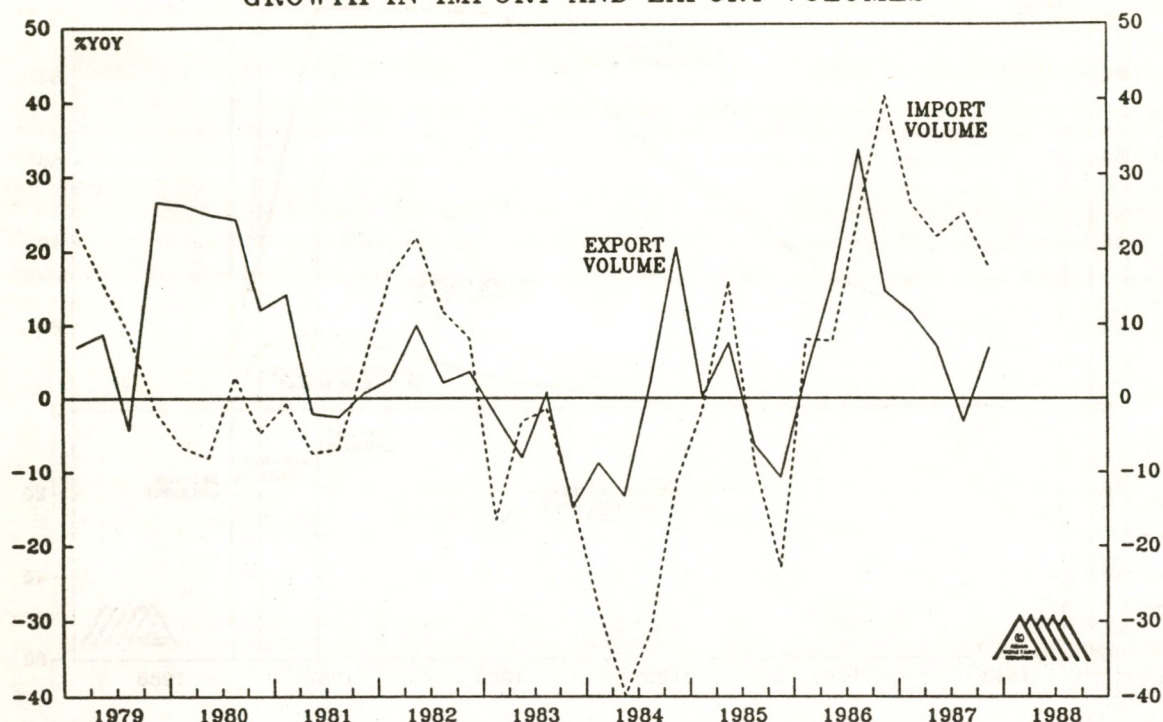
JAPAN'S INTERNATIONAL TRANSACTIONS IN SECURITIES



JAPAN BALANCE OF MONETARY MOVEMENTS



**THE PHILIPPINES
GROWTH IN IMPORT AND EXPORT VOLUMES**

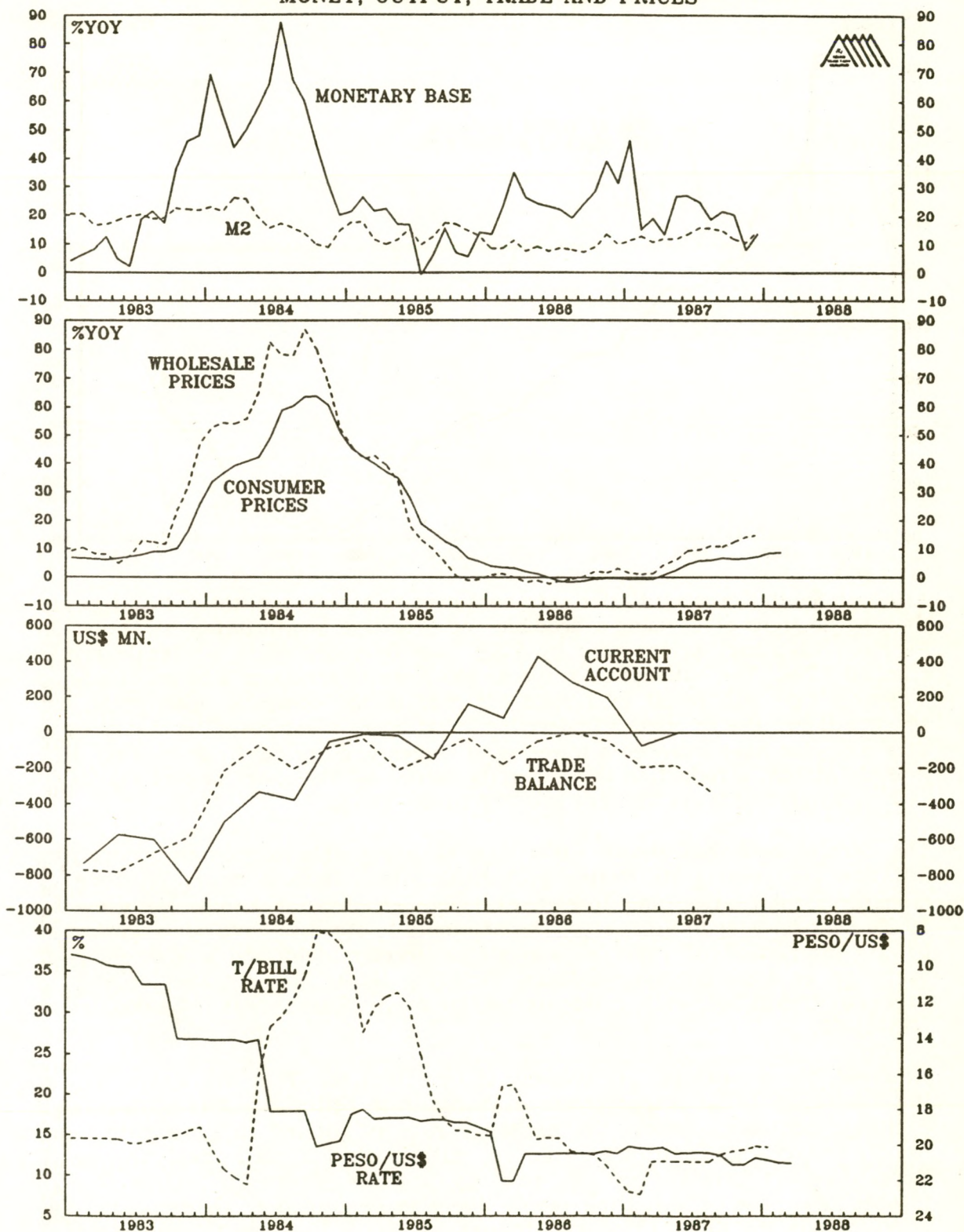


During 1987 the Philippines economy grew by 5.6%, which after allowing for rapid population growth of 2.6% per annum, translated into the first per capita gain in real GNP since the early 1980s. But to date the recovery has been dangerously imbalanced and accompanied by domestic bottlenecks, highlighting the country's extremely modest productive potential. The major impetus to economic activity came from consumption expenditure, fuelled by rapid money growth made possible by inflationary financing of the budget deficit. Private investment spending remained subdued in response to uncertainties over the Agrarian Land Reform Programme and the coup attempts.

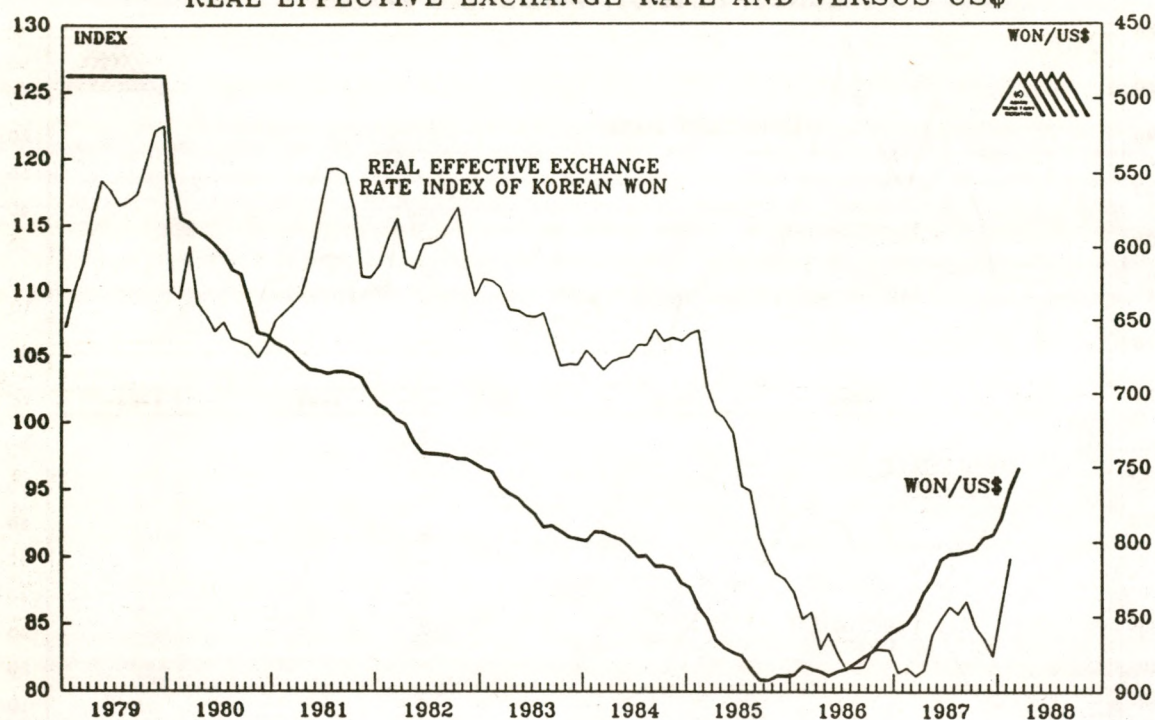
With production lagging, imports rose sharply and exports stagnated, leading to a deterioration in the trade account which was accompanied by an acceleration in the inflation rate. Export volumes rose by 6%, compared with a 31% gain in import volumes, while consumer price inflation had reached 9.6% in February compared with a low of -1.6% in August 1986. In the same month the import cover ratio as measured by the central banks' foreign exchange reserves fell to 2 months compared with the IMF recommendation of 3 months.

Notwithstanding these developments the exchange rate drifted only marginally lower. Towards the end of 1987 and in early 1988 the central bank undertook a passive tightening of monetary policy, failing to offset by open market operations the drain on liquidity arising from speculative pressure on the currency. In March overnight interbank rates traded as high as 30%, and the 91 day Treasury bill rate traded up to 15% against the lows of 10% a year ago. As there is a widespread realisation of the need to broaden the recovery to include investment, further rises in interest rates are unlikely, resulting in a faster exchange rate depreciation.

THE PHILIPPINES MONEY, OUTPUT, TRADE AND PRICES



S.KOREA
REAL EFFECTIVE EXCHANGE RATE AND VERSUS US\$

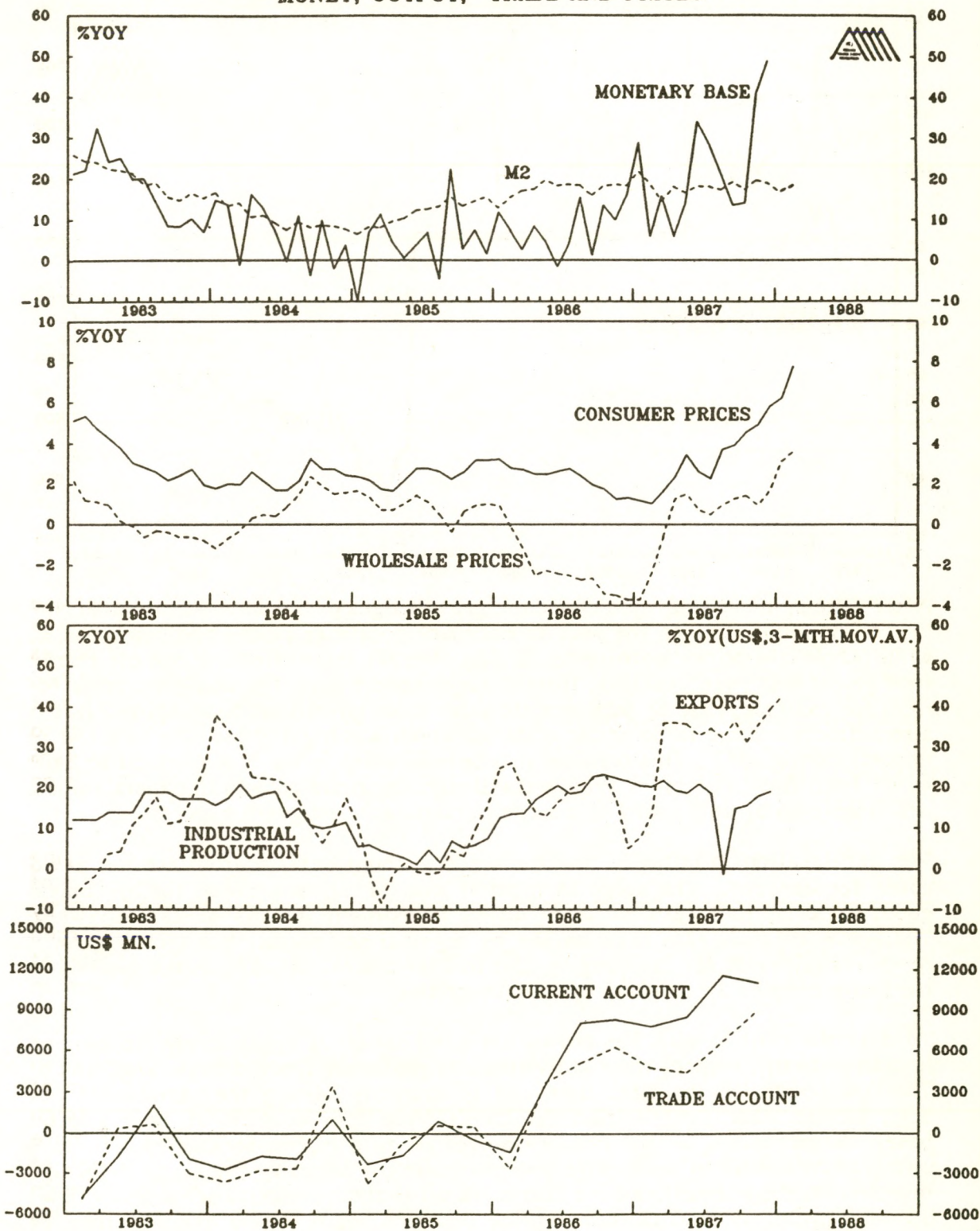


Although South Korea's inflation rate continues to accelerate, the authorities are showing no signs of devising a credible and effective anti-inflation strategy. In February consumer prices rose by 7.8% year-on-year, while wholesale prices climbed 3.7%. The authorities' response has been to announce a series of ad-hoc measures that will result in a once off drop in the domestic price level, but which will do little to contain underlying inflationary pressures. The measures to date this year have included a lowering of domestic oil prices by an average 10% in early March, a reduction in electricity tariffs by 3%, lower import tariffs on raw materials and lower indirect taxes on luxury goods.

The central bank has shown little sign of being able to contain underlying inflation by meeting its money growth targets. Despite heavy issuance of monetary stabilisation and foreign exchange equalisation bonds, M2 grew by 19.2% year-on-year in February. The attempts to sterilise have been reinforced by a continuation of rapid repayment of foreign debt and a tightening of exchange controls on non-residents, including limits on purchases of won in excess of US\$20,000, while residents' foreign travel allowance is to be doubled to US\$10,000.

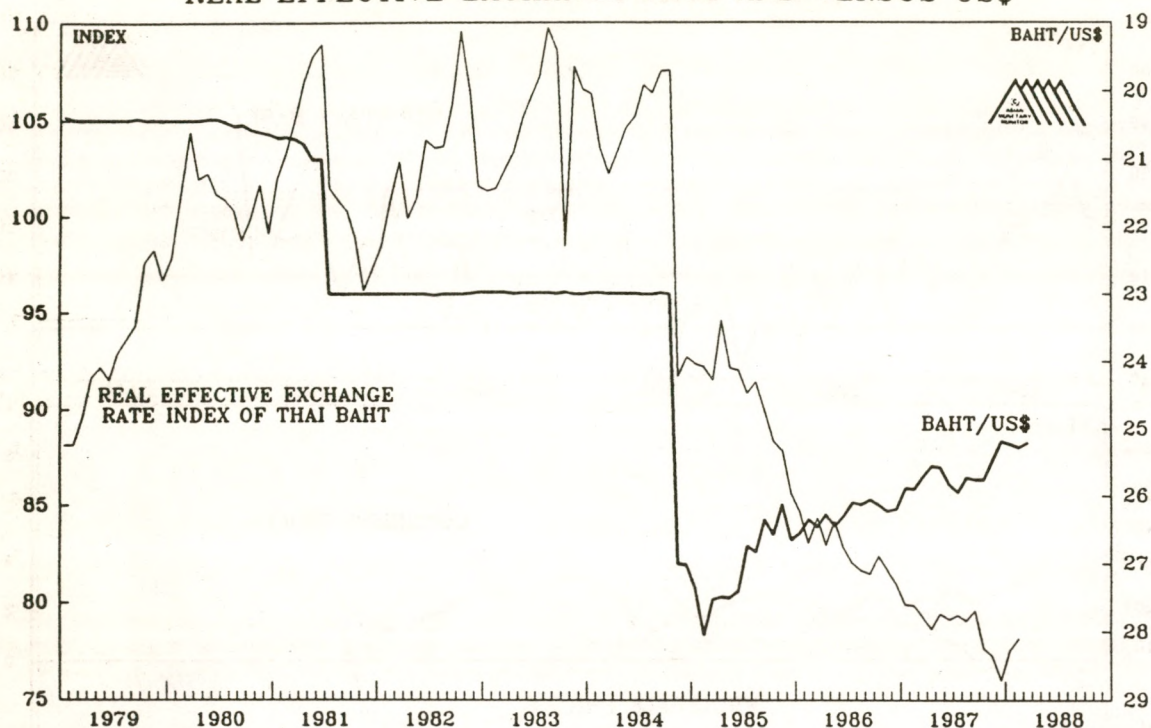
However, these measures are unlikely to be effective. They are a symptom of the adherence to an inappropriate exchange rate policy together with foreign exchange controls. Unless the exchange rate is allowed to appreciate more rapidly or exchange controls are relaxed, neither of which seems likely in view of Korea's export oriented growth strategy and the desire to reduce foreign indebtedness, the central bank seems likely to be forced to tighten later this year. Within the Korean financial framework this is likely to take the form of quantitative controls on bank lending, as well as higher interest rates.

S.KOREA MONEY, OUTPUT, TRADE AND PRICES



THAILAND: AS GROWTH ACCELERATES BOTTLENECKS BEGIN TO EMERGE

THAILAND REAL EFFECTIVE EXCHANGE RATE AND VERSUS US\$

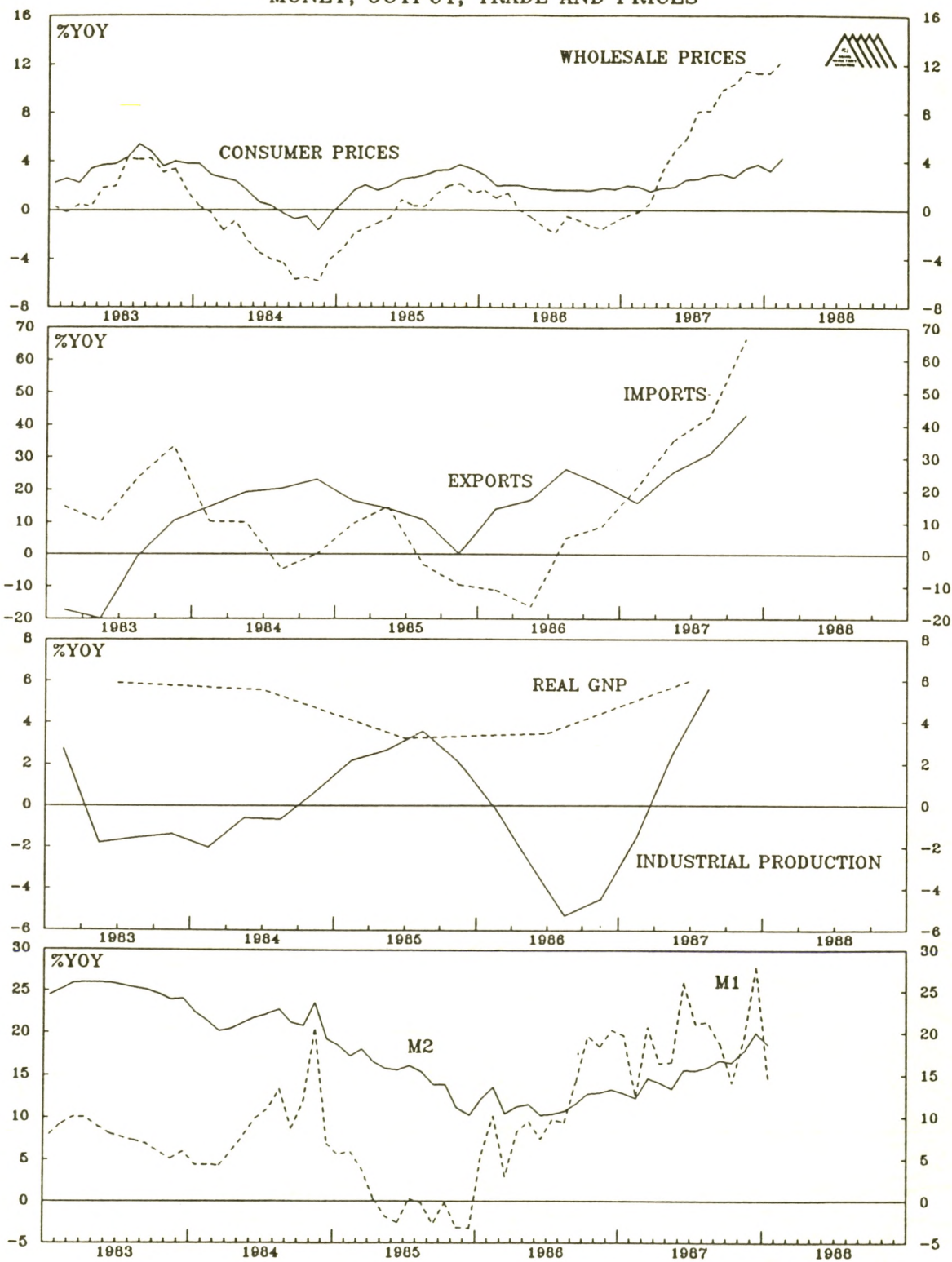


After fifteen months of rapid economic growth signs of bottlenecks are emerging in the Thai economy. In the year to February consumer prices climbed by 4.2%, while wholesale prices were up by 11.7%. In part this reflects a one off rise in food prices last year, resulting from drought conditions. The domestic price for rice, for example, rose by 40% despite sales from government stockpiles. But it also reflects a surge in domestic demand, which was highlighted by a 40% rise in imports during 1987. This resulted in a deterioration in the trade deficit to Baht 46 bn from Baht 14.4 bn in 1986, notwithstanding rapid growth in export values, which were up by 26% owing to a surge in manufactured goods exports.

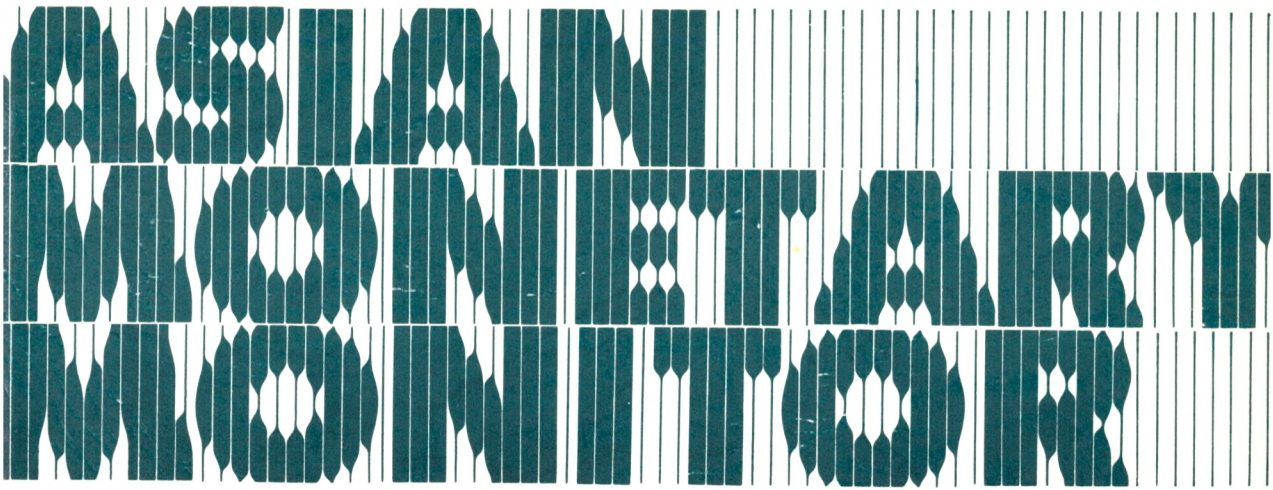
The acceleration in inflation and the trade account deterioration are not yet a cause for concern. The surge in imports was largely accounted for by capital goods imports, that resulted from direct investment inflows of capital, while Thailand's inflation rate remains low by regional standards. But money growth remains rapid with M1 climbing by 25% in 1987 and M2 by 20%, at the top end of the range deemed appropriate by the authorities.

To date the central bank has shown little indication of aggressively mopping up liquidity. In this respect their activities last year were limited to issuing Bank of Thailand bonds for the first time and temporarily raising the permissible net open foreign exchange position for banks from 20% to 40% of their capital base. Nevertheless, as the country moves on to a higher secular growth path owing to its enhanced productive potential brought about by the surge in foreign investment, the authorities have also made clear their desire to see a less violent business cycle. Should consumer price inflation begin to rise much further, or consumer good imports accelerate, both of which seem likely, the Bank of Thailand may be forced to tighten later this year.

THAILAND MONEY, OUTPUT, TRADE AND PRICES





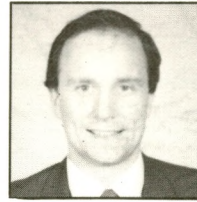


CONTENTS

	Page
JAPAN:	
Prospects for a More Rapid Trade Adjustment by Tim Lee	1
TAIWAN:	
A Contracting Trade Surplus Should Permit the Central Bank to Reduce Monetary Growth by Tim Lee	14
ECONOMIC CAPSULES:	
Hong Kong: Rising Interest Rates Reflect Tightening Liquidity Conditions	IPM 26
Thailand: Trade Deficit Widens, but Inflation Is the Bigger Problem	IPM 28



John G. Greenwood
Publisher
Group Economist
G.T. Management PLC



Tim J. Lee
Editor
Economist
G.T. Management (Asia) Ltd.



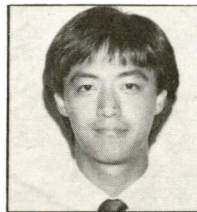
Ian P. MacFarlane
Economist
G.T. Management (Asia) Ltd.



Daniel L. Gressel
Economist
G.T. Management (Asia) Ltd.



Sook Yee Li
Statistician



Michael Wong
Graphics



Isabella Ling
Administration

© ASIAN MONETARY MONITOR LTD., HONG KONG 1988

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the editor.

Asian Monetary Monitor is a bimonthly publication specialising in the analysis of economies along the Asian Pacific Rim. Sold by subscription only, price US\$200 p.a. inclusive of air mail delivery to any part of the world. Correspondence and subscriptions should be addressed to the Editor, Asian Monetary Monitor Ltd., GPO Box 12964, Hong Kong.

ASIAN MONETARY MONITOR

May - June, 1988

Vol. 12 No.3

JAPAN

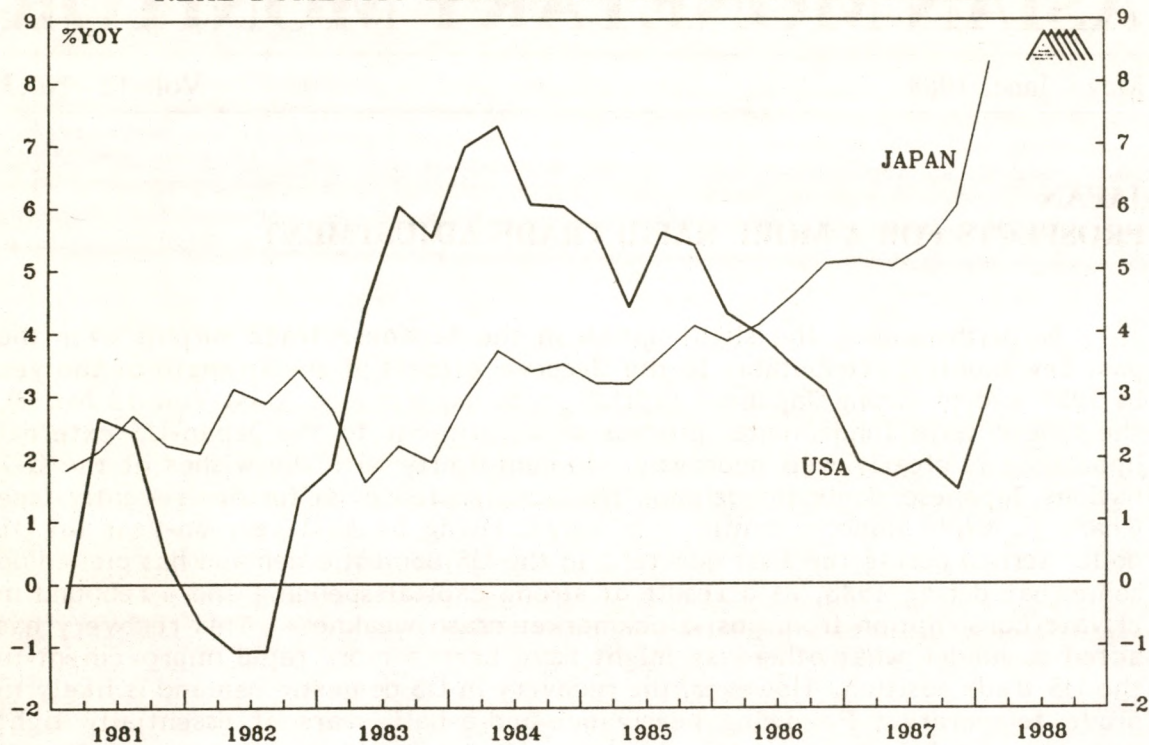
PROSPECTS FOR A MORE RAPID TRADE ADJUSTMENT

Notwithstanding the slight uptick in the Japanese trade surplus over the past few months, attributable to the 'J-curve' effects of the strength of the yen in 1987 and to strong Japanese capital goods exports (see AMM Vol. 12 No. 2), the longer term fundamental process of adjustment to the Japan-US external imbalance is clearly well underway. In conformity with the wishes of the G-7 nations Japanese domestic demand has accelerated even further recently (see Chart 1), while imports continue to surge, rising by 40% year-on-year (in US dollar terms) during the first quarter. In the US domestic demand has picked up somewhat during 1988, as a result of strong capital spending and a rebound in private consumption from post-stockmarket crash weakness. This recovery has acted to hinder what otherwise might have been a more rapid improvement in the US trade position. However, the recovery in US domestic demand is likely to prove temporary. Following nearly one-and-a-half years of essentially tight monetary conditions in the US, the strong cyclical relationship between money supply growth and economic growth (see Chart 2) suggests that US domestic demand should weaken by late this year or early in 1989. The tendency towards weakness in US domestic demand is likely to be reinforced by a recent further tightening in monetary policy by the US Federal Reserve. Between March and June the Fed has engineered an increase in the inter-bank Federal Funds rate from below 6.5% to 7.5%, a rise of similar magnitude to that which occurred in the autumn of last year, prior to the global stockmarket crash.

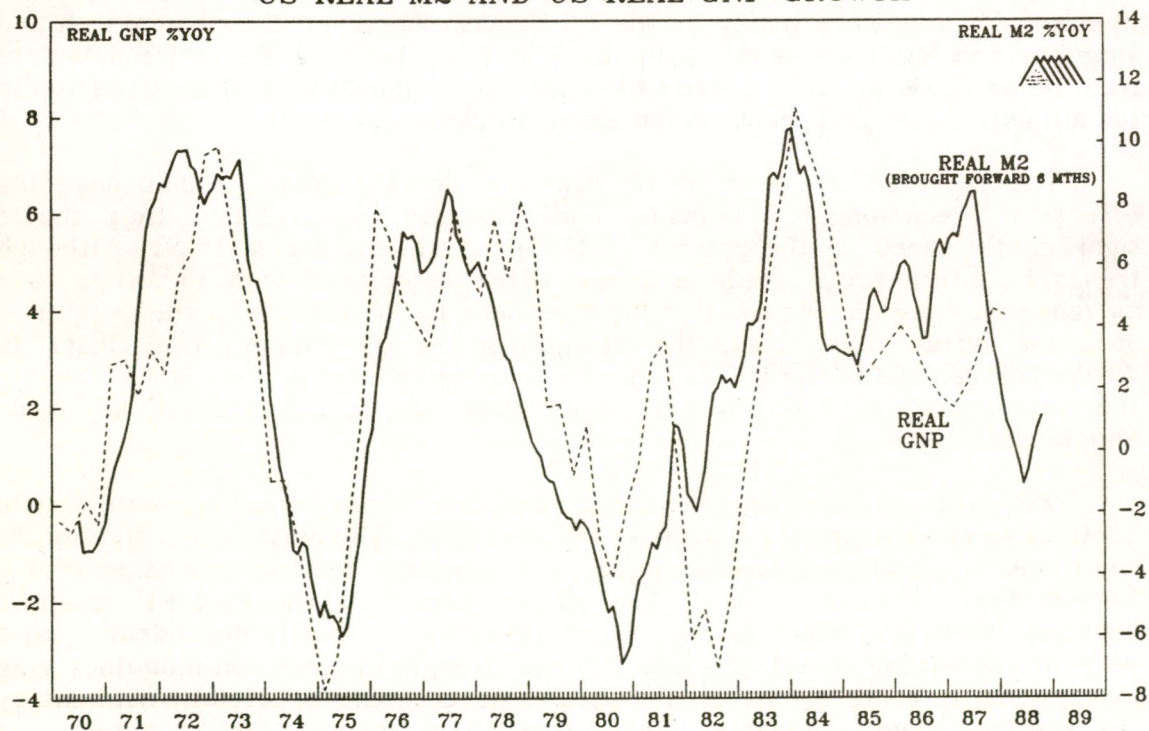
The expected slowdown of US domestic demand growth should have the effect of weakening US imports, and Japanese exports, and thus should significantly speed up the process of trade adjustment during 1989. Although trends in international trade are now often associated with exchange rate movements, a significant relationship continues to exist between the growth of Japanese export volumes and the strength of the US economy (see Chart 3). Weakening demand in the US, in reducing Japanese export growth, would remove the last obstacle hindering a more rapid correction to the international trade imbalances.

Within Japan domestic demand growth, and hence import growth, should continue to remain strong for at least the next year. The most recent six months have seen a significant broadening of the domestic demand expansion into a fully-fledged consumer boom. The earlier period of the current Japanese economic recovery, which began in late 1986, was primarily dependent upon a very strong housing sector (see Chart 4) and strength in other non-manufacturing investment, to some extent attributable to government-directed investment by the electric power companies, as well as fiscal spending by the government

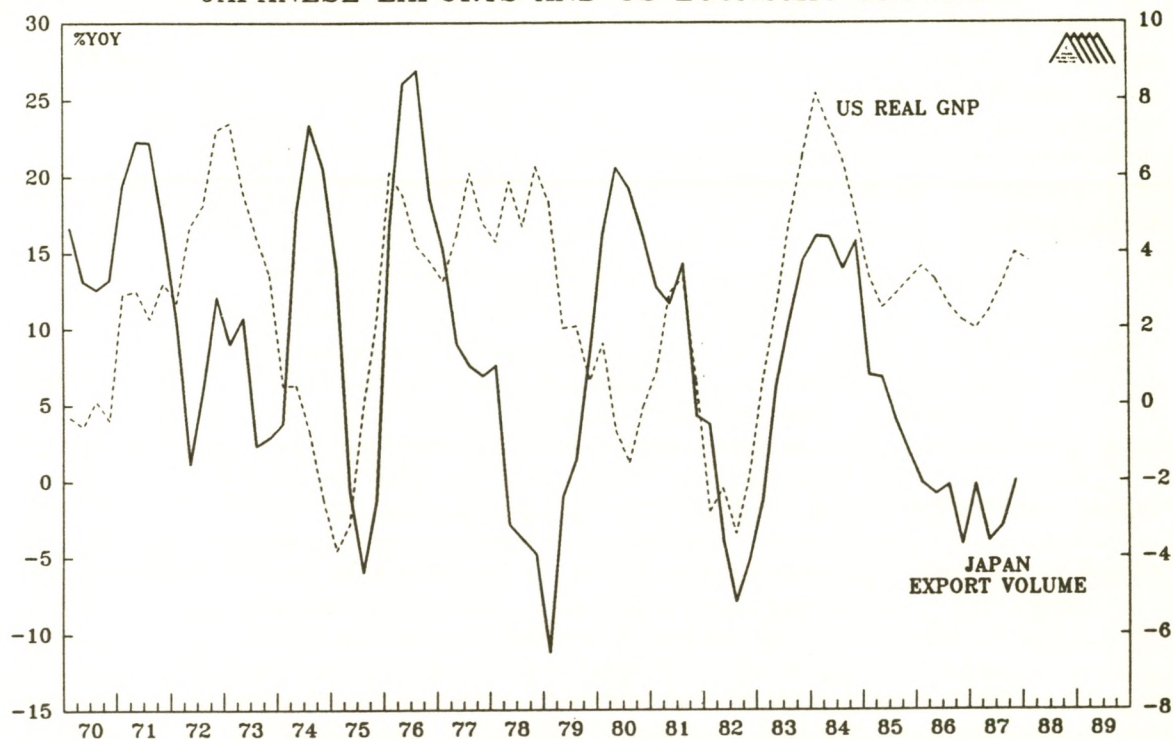
JAPAN: CHART 1
REAL DOMESTIC DEMAND IN THE MAJOR ECONOMIES



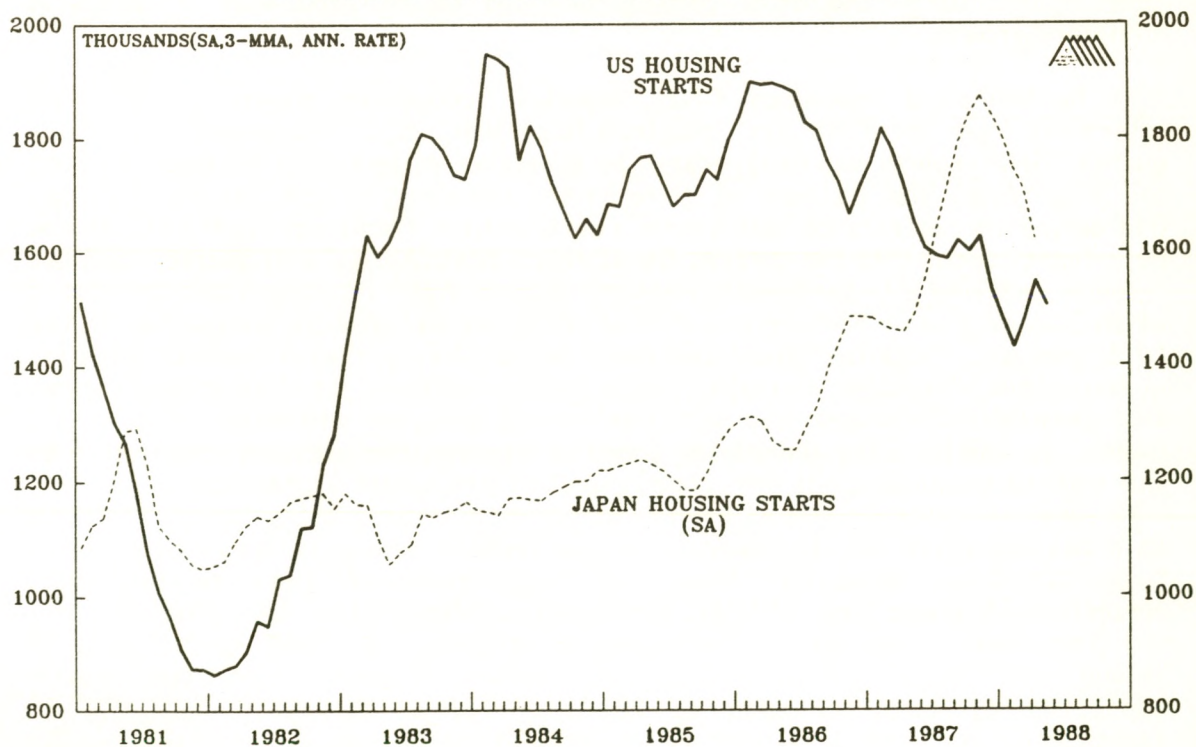
JAPAN: CHART 2
US REAL M2 AND US REAL GNP GROWTH



JAPAN: CHART 3
JAPANESE EXPORTS AND US ECONOMIC GROWTH



JAPAN: CHART 4
HOUSING STARTS IN THE US AND JAPAN

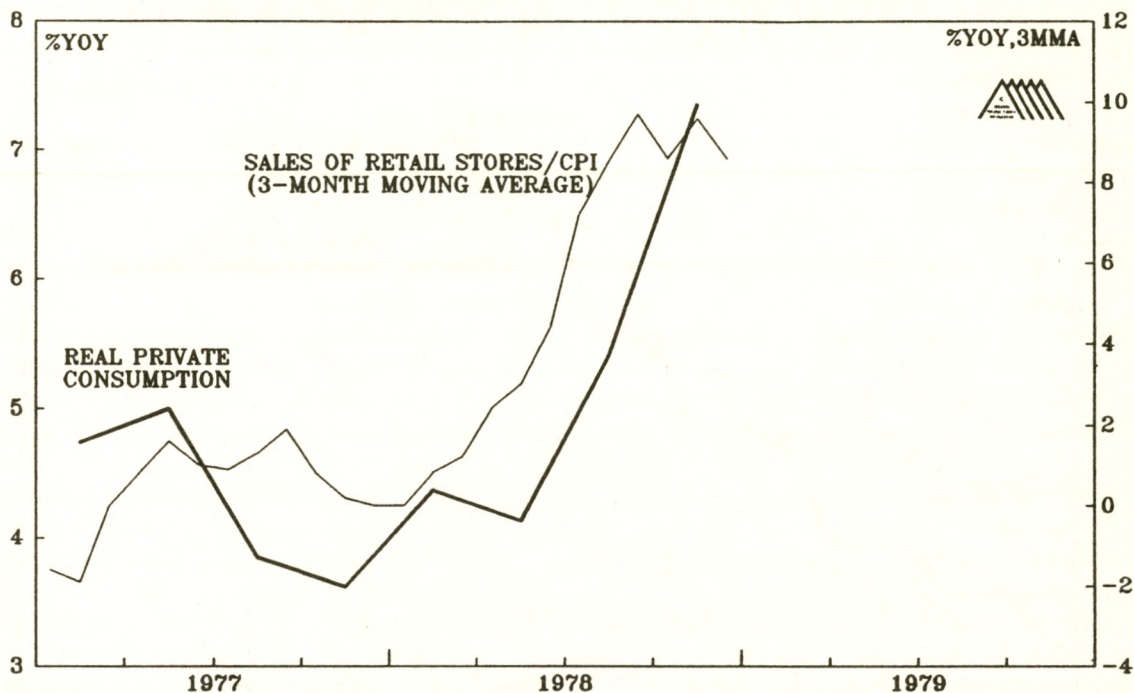


itself. Although consumer spending growth was firm during 1987, reaching 3.9% for the year, the pick-up in consumption was confined largely to non-salaried households (i.e. sole proprietors, the self-employed etc.) who derived the most benefit from the boom in property and stock prices. By later last year rising employment and improved growth of bonuses and wages for wage and salary earners had allowed the domestic demand recovery to percolate through to consumer spending by salaried households. During the first quarter of this year real consumer spending consequently surged by 10.8% (quarter-on-quarter, annualised).

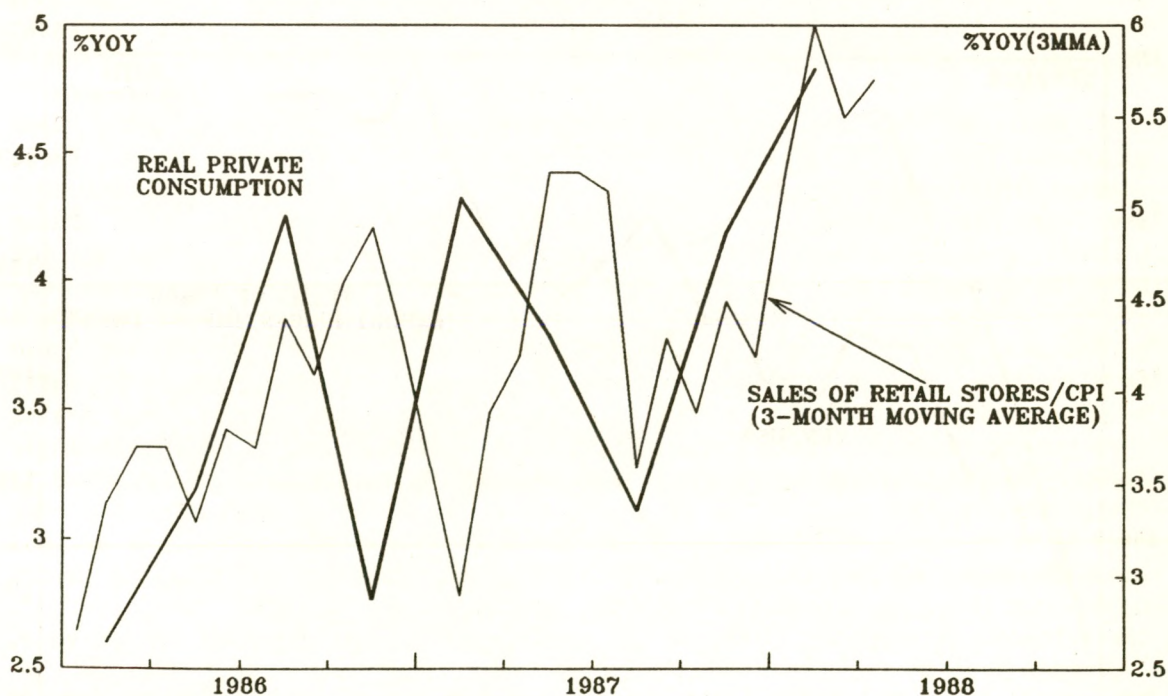
The development of the current Japanese consumer spending boom has very much mirrored the previous Japanese domestic demand expansion in 1977-78. Then consumer spending accelerated in mid-1978, following an extended period of yen strength (see Chart 5). As Charts 6 and 7 illustrate, the factors behind the 1977-78 domestic demand expansion were very much the same as those behind the current domestic recovery. In both periods a sharp appreciation of the yen led to a rise in Japan's terms of trade (in 1986 the rise in the terms of trade was further reinforced by the collapse in the international oil price), encouraging more rapid growth of real domestic demand at the expense of real external demand. (A rise in the terms of trade means that consumers and companies are able to purchase the same volume of imports with a lesser proportion of their incomes, and thus have more income to spend on purchasing a greater volume of imports or on domestic product.) In both periods, also, the expansion of domestic demand was encouraged by a low or falling inflation rate and accommodative domestic monetary conditions (see Chart 7). In the recent experience, Japanese monetary conditions were sharply eased following the February 1987 Louvre Accord to stabilise exchange rates, which committed the Bank of Japan to intervening in the foreign exchange markets to prevent the yen from appreciating, and as a consequence led to an expansion of domestic monetary growth.

In terms of measured GNP, Japanese economic growth should slow somewhat from the 1988 first quarter's huge jump of 11.3% annualised. First quarter GNP growth was exaggerated by a number of technical factors including the leap year, the pattern of government spending, which has been strong (reflecting the effects of last year's Yen 6 trillion fiscal package) but has not been front-loaded into the current fiscal year's first (April-June) quarter, and tax changes unfavourable for housing, effective from April 1st, which had the effect of encouraging some housing investment to be accelerated for completion in the first quarter. Together these technical factors imply that a part of the first quarter's surge in GNP was effectively 'borrowed' from subsequent quarters so that growth in the second and third quarters of this year will be correspondingly lower. In addition, the underlying trend in housing, the previous locomotive to the current expansion, has now clearly peaked (see Chart 4), reflecting the very high level of starts which had been reached and the diminishing value of various land tax incentives to the construction of rental housing as Tokyo land prices have corrected somewhat from the huge gains of 1985 to mid-1987. Nevertheless, underlying GNP growth should continue at a strong 5%-6% rate, led from here by the broadening expansion of consumer spending. Not only do strong real wage growth and accommodative liquidity conditions remain supportive of consumer spending but tax changes this year will also be favourable. As part of a package of Yen 5.6 trillion in tax cuts currently under

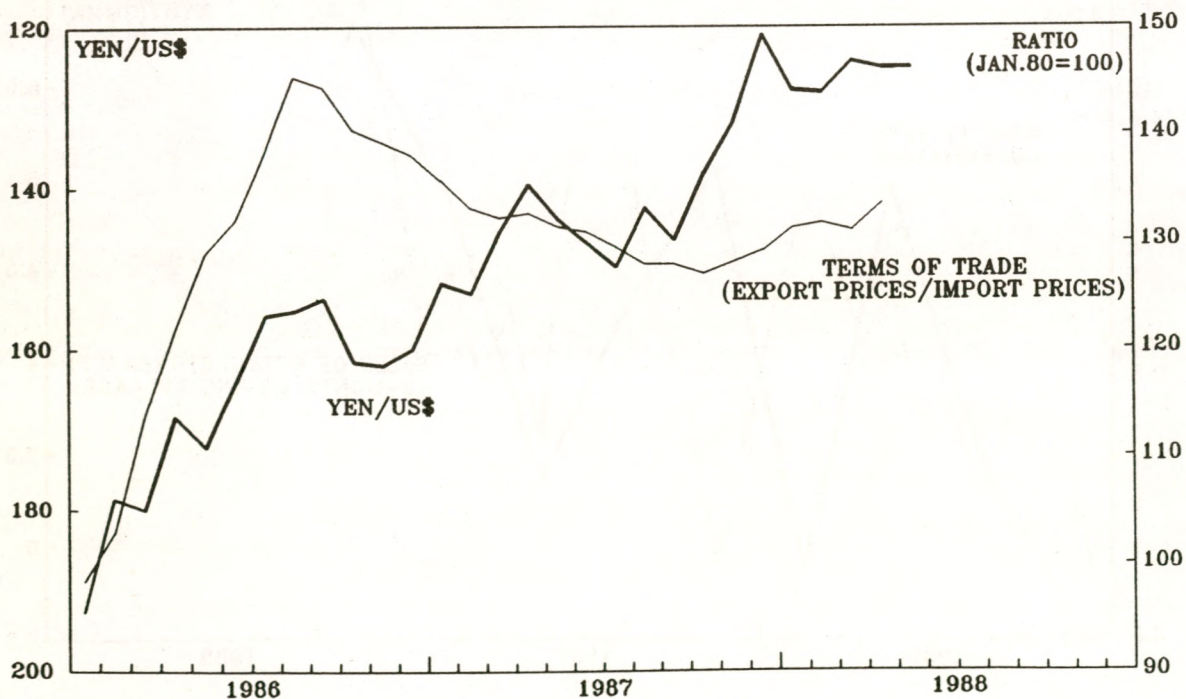
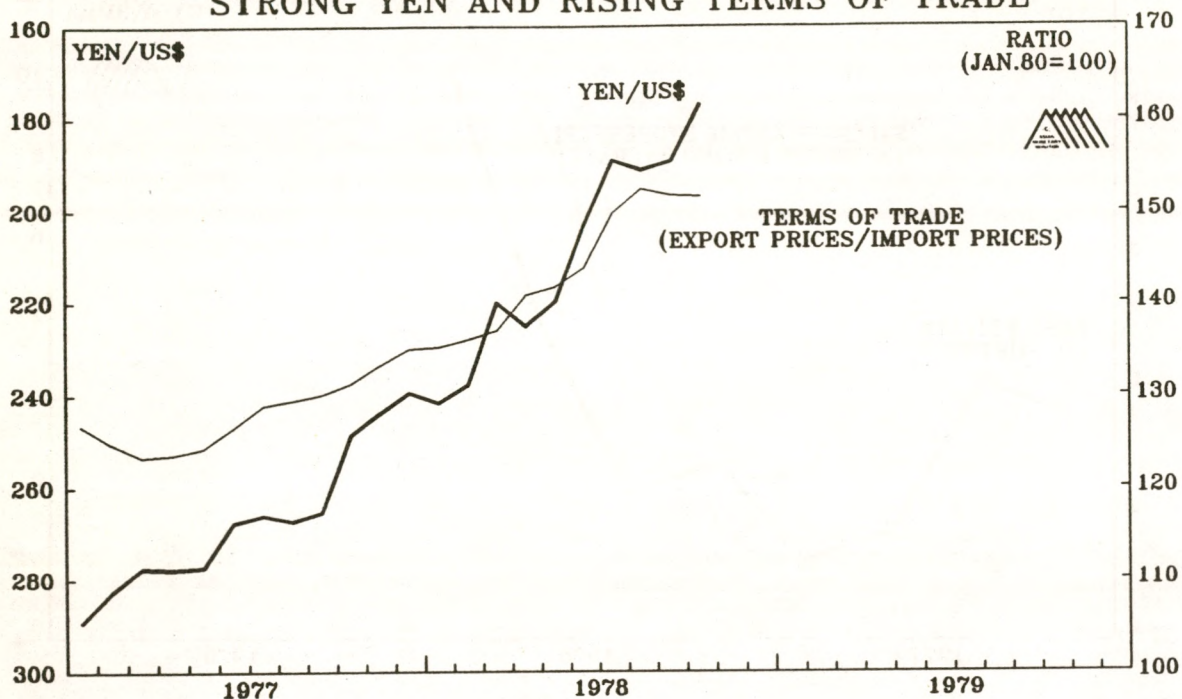
JAPAN: CHART 5 JAPANESE CONSUMER SPENDING BOOMED IN 1978



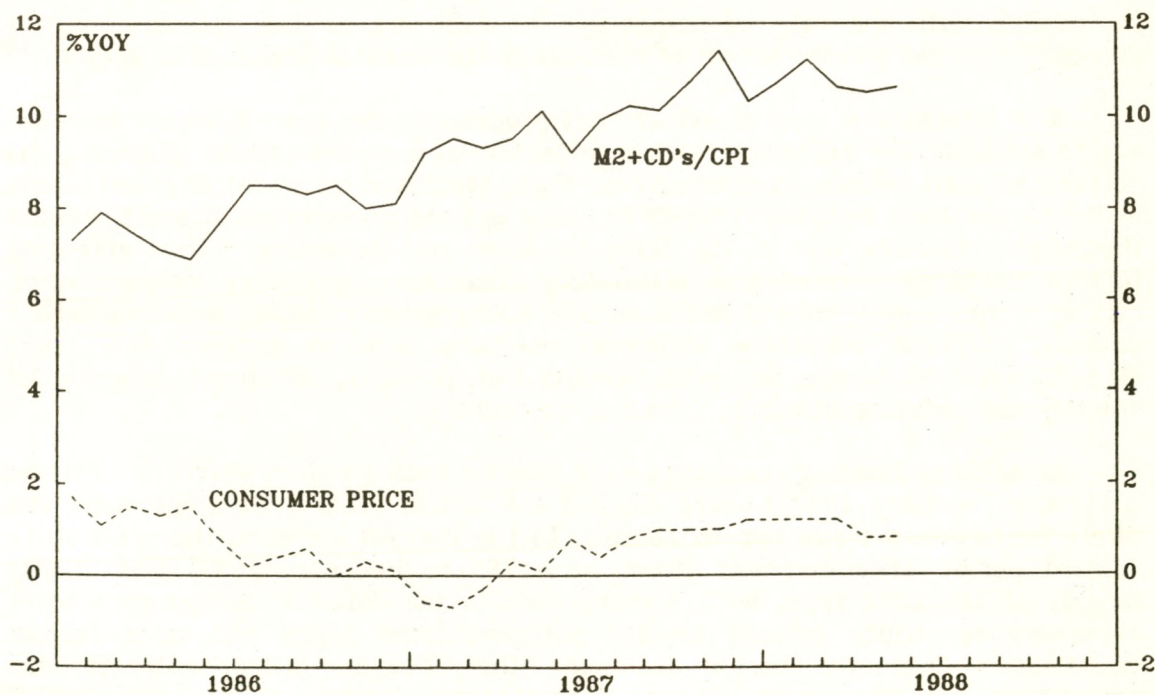
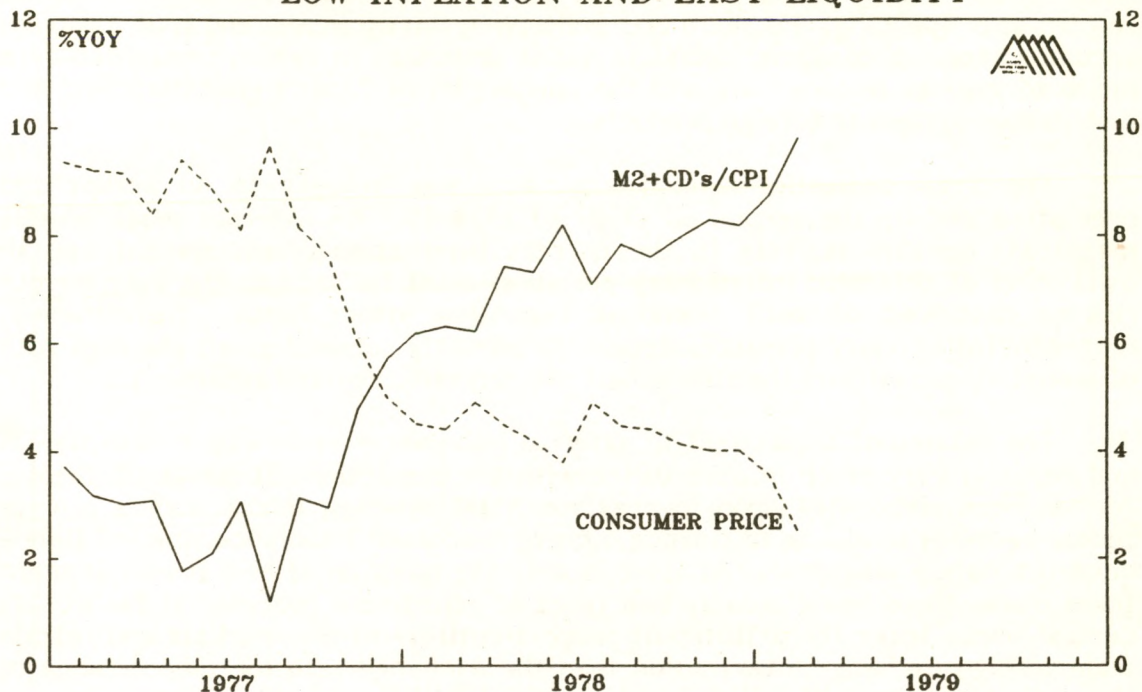
AND IS STRENGTHENING CURRENTLY



JAPAN: CHART 6 THE MAJOR INFLUENCES ARE THE SAME STRONG YEN AND RISING TERMS OF TRADE



JAPAN: CHART 7 LOW INFLATION AND EASY LIQUIDITY



debate, income taxes are expected to be reduced by between Yen1.25 trillion and Yen2 trillion during the current fiscal year, which should add a further stimulus to consumer spending. Furthermore, underlying the cyclical trend is an apparent secular change in consumer spending habits underway in Japan, reinforced by a move to greater leisure time and the opening up of Japan's goods markets and distribution system to foreign products.

The 1978 domestic demand expansion was brought to an abrupt and premature end by the second oil crisis of 1979-80. An external shock of this magnitude appears unlikely in the current international environment but an awakening of domestic inflationary pressures must be seen as the only serious risk to continued domestic economic expansion within Japan. Nevertheless, currently inflationary pressures appear surprisingly subdued given the high rate of monetary growth and the strength of the domestic demand expansion.

The pattern of adjustment to external imbalances underway in both the US and Japan is very much in accordance with the predictions of economic theory. As has been elaborated upon in previous AMM articles, if the world's private sector becomes unwilling to finance a current account imbalance, the imbalance must ultimately disappear. At issue is only the question of how the adjustment takes place, there being broadly two types of adjustment process. If the world's central banks leave the adjustment process entirely to the markets and refrain from foreign exchange intervention then the exchange rate for the currency of the deficit country will fall to whatever level will induce the private sector to take on the exposure to the currency of the deficit country (or, alternatively, a 'short' position in the currency of the surplus country (-ies)) necessary to finance the imbalance. This level of the exchange rate will necessarily be a level which will result in an adjustment of the current account imbalance along a path compatible with the rate of acquisition of exposure to the deficit country's currency that the private sector of the rest of the world is prepared to accept.

The alternative type of adjustment process occurs when the central banks act to stabilise the exchange rate, in effect taking on the role of financing the current account imbalance themselves. Fully sterilised intervention is untenable in the longer term because it tends to place upward pressure on interest rates in the surplus country and in the limit becomes self-defeating. Thus effective foreign exchange intervention ultimately must have monetary consequences, raising money supply growth in the surplus country and reducing it in the deficit country. These monetary changes, in turn, act to correct the trade disequilibrium by raising domestic demand and, possibly, inflation in the surplus country and reducing demand in the deficit country.

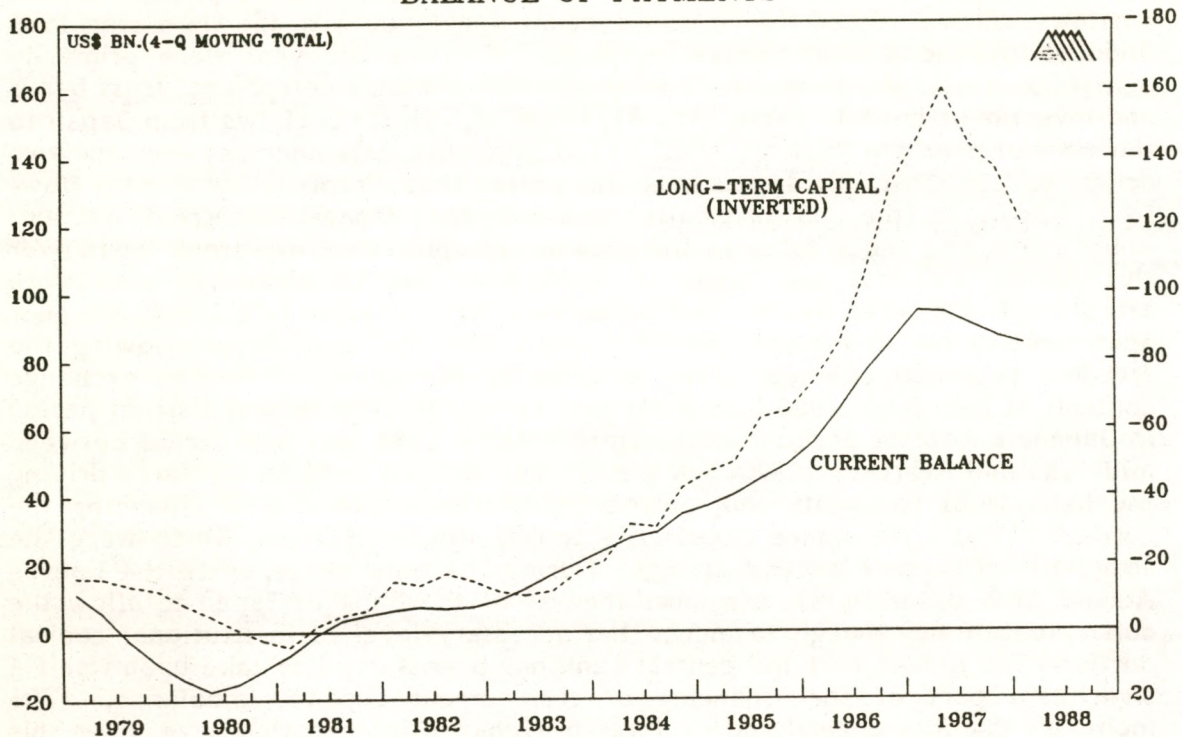
In a 'dirty-floating' exchange rate regime such as that which has existed since the February 1987 Louvre Accord the actual process of adjustment will likely lie between these two extremes. In the current instance the pre-Louvre Accord period of adjustment (from mid-1985 to February 1987) was clearly largely of the first type, with a sharp drop in the dollar exchange rate being necessary to induce private capital outflows from Japan and other surplus countries. Over the period following the Louvre Accord, however, the adjustment has been more of the second type, leading to an expansion in monetary growth and domestic demand in Japan and a monetary contraction and weakening demand in the US economy.

As has been discussed in previous AMM articles on the balance of payments adjustment (AMM Vol. 10 No. 3, AMM Vol. 11 No. 3) Japanese private capital outflows which financed the current account imbalance with the US during 1986 (induced by the sharply weakening dollar vis-a-vis the yen) were primarily institutional (i.e. purchases of US securities by insurance companies, trust banks and investment trusts). From 1981-85, however, capital outflows from Japan to the US had been the 'driving force' in the payments imbalance between the two countries (see Chart 8). It was over this period that sharply rising capital flows from Japan to the US originally 'created' the Japan-US current account imbalance. The major force in the growth of capital outflows from Japan over this period was not the financial institutions but corporations, who were attracted to US securities by their attractive rate of return relative to the poor opportunities for investment within Japan's domestic economy, following the freedom to invest overseas given to them by the lifting of foreign exchange controls in December 1980 (see AMM Vol. 11 No. 3). The second distinct period in Japanese capital account developments since 1981 was the period between mid-1985 and February 1987 when the current account became the force driving the balance of payments and, as mentioned above, the role of financing the current account imbalance necessarily fell to the institutions, which were the recipients of Japan's 'excess' savings. During the third phase, since the Louvre Accord of February 1987, the unwillingness of the Bank of Japan to allow the dollar to fall far enough to induce the necessary level of institutional capital outflows has meant that the central bank has been forced to take upon itself a significant part of the financing of the current account imbalance. The monetary changes engendered by foreign exchange intervention have, over this period, altered the nature of the balance of payments adjustment process to one in which a differential between the growth of domestic demand in Japan and the US has taken a greater weight relative to exchange rate movements in the adjustment process.

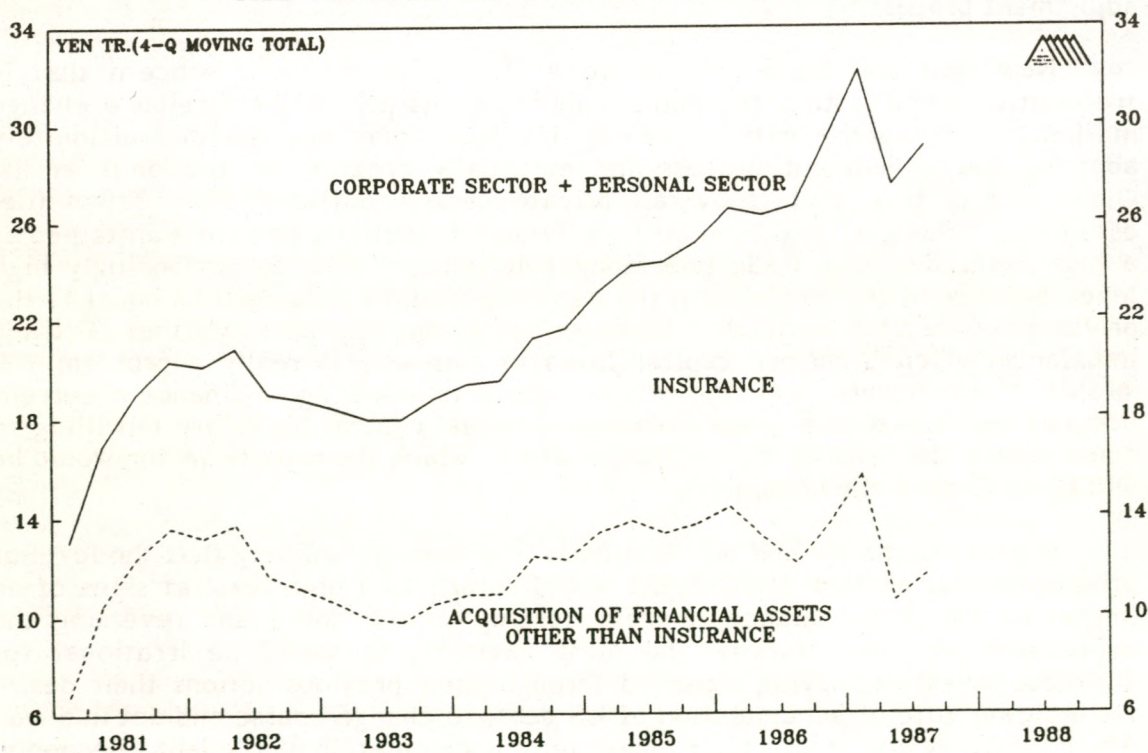
Now that the trade adjustment is clearly underway, a concern that is frequently voiced is that the dollar could rise sharply on the foreign exchange markets, in sympathy with improving US trade numbers, thereby ultimately aborting the adjustment process and eventually creating an economic crisis. Clearly it is true that if overall private capital outflows from Japan (i.e. essentially unhedged long-term outflows) rise substantially and are maintained at a high level then the trade imbalance will remain, at a correspondingly high level, because in the longer term the current account surplus will be equal to the private net capital outflow. However, it is questionable whether a trade imbalance which 'finances' capital flows in this way is really a problem. A 'problem' only occurs when the private sector is unwilling to finance a current account imbalance at a given exchange rate and central banks are unwilling to countenance the level of the exchange rate at which the private sector would be willing to finance the imbalance.

More importantly and practically, it is extremely unlikely that the level of private capital outflow from Japan would return to a high level at signs of an improving US trade balance, thereby forcing up the dollar and reversing the adjustment process. Firstly and most obviously it would be irrational for Japanese investors, having signalled through their previous actions their desire for a slower rate of accumulation of US debt, to change course and act in a way which will now accelerate their longer term accumulation of US debt. Secondly,

JAPAN: CHART 8
BALANCE OF PAYMENTS



JAPAN: CHART 9
THE PRIVATE SECTOR FINANCIAL SURPLUS



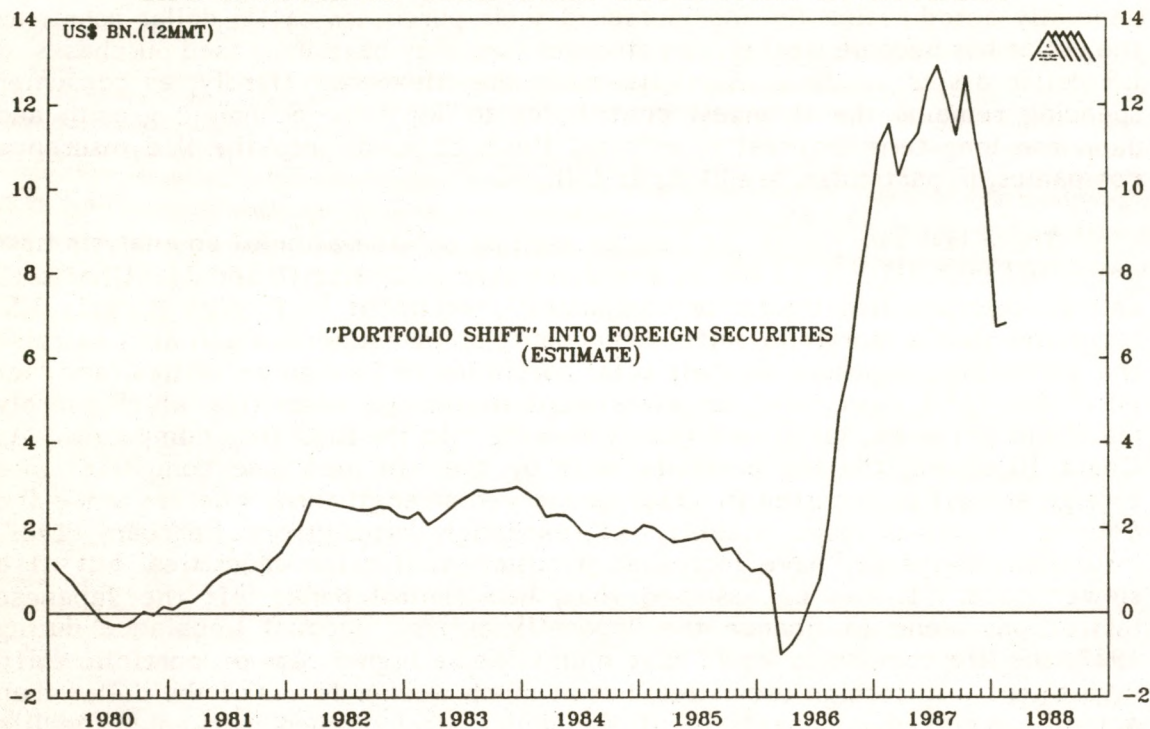
as discussed in previous AMMs (AMM Vol. 11 No. 3 and AMM Vol. 11 No. 4), apart from a number of short-term instances, the Japanese institutions have generally acted rationally and increased their purchases of US dollar assets as the dollar has become weaker, not stronger (i.e. they have increased purchases of US dollar assets as those assets have become cheaper). Thirdly, as consumer spending remains the strongest contributor to Japanese economic growth and Japanese long-term interest rates rise, flows of funds into the life insurance companies, in particular, are likely to fall.

These last two points can best be seen by consideration of an analysis first presented in AMM Vol. 11 No. 4, and illustrated in Charts 10 and 11. Charts 10 and 11 separate life insurance companies' investment in foreign (largely US) securities into a 'portfolio shift' component, or investment which acts to raise the percentage exposure of their total portfolios to foreign securities, and 'net purchases from cash flow', or investment in foreign securities which merely maintains exposure, given new money flowing into the insurance companies. As Chart 10 shows, the big portfolio shift by the life insurance companies into foreign securities occurred in 1986, as the yen strengthened, whereas since the Louvre Accord-imposed stability of exchange rates from February 1987, insurance companies have increased exposure to foreign securities, but at a slower pace. It can be assumed that, had central banks left the Japanese institutions alone to finance the Japan-US current account imbalance during 1987, the life companies would have maintained a higher rate of 'portfolio shift' investment into foreign securities, but at much weaker levels of the dollar than actually occurred. Conversely, if the dollar strengthened markedly, the life companies could be expected to maintain a lower level of 'portfolio shift' investment into dollar assets.

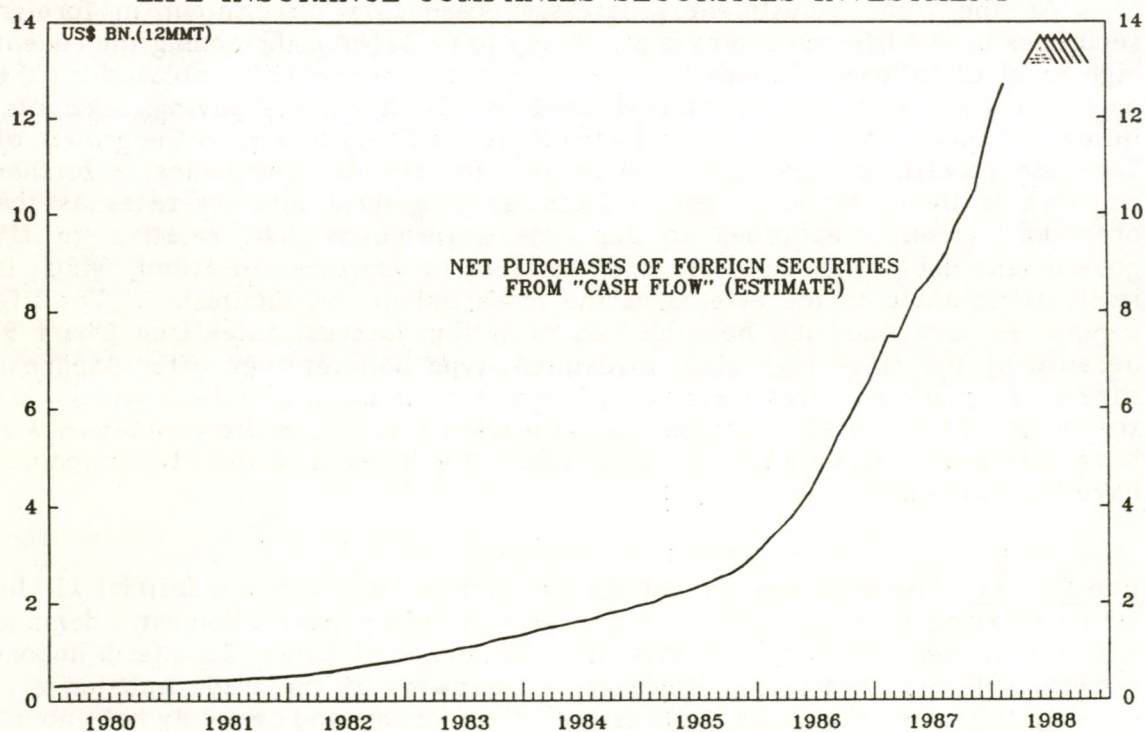
As the trade adjustment progresses, 'cash flow' investment in foreign securities by the life companies is also likely to fall. Notwithstanding the recent high level of inflows of funds into life insurance companies stimulated by the abolition, from April 1st, of interest tax-free bank and postal savings accounts, inflows of funds into the Japanese institutions are likely to fall as the growth of Japanese private savings slows. Moreover, for the life companies, a further negative is likely to be a rise in Japanese long-term interest rates as the premium currently accorded to Japanese government debt relative to US government debt (when both are seen relative to domestic inflation), which is itself attributable to the effects of the trade imbalance, diminishes. The life companies have been big beneficiaries of falling interest rates (see Chart 9) because of the fixed high yield investment-type policies they offer Japanese savers. As market interest rates rise, it is not clear that institutions which gain the share of the overall Japanese savings market lost by the life companies will have such a high demand for US dollar assets (for income) as the life companies have had in the past.

FORECAST: The Japanese current account surplus (and US trade deficit) will be on a narrowing path, particularly from early in 1989 when US domestic demand will be weaker but Japanese domestic demand, and hence Japanese import growth, will remain strong. However, a narrowing of the trade imbalance is unlikely to impart major upward pressure on the dollar, and certainly not enough to abort the process of trade adjustment, for three reasons. Firstly, the growth

JAPAN: CHART 10
LIFE INSURANCE COMPANIES SECURITIES INVESTMENT



JAPAN: CHART 11
LIFE INSURANCE COMPANIES SECURITIES INVESTMENT



of Japanese savings, and hence Japanese capital outflows, will be slowing. Secondly, the life insurance companies (who have a naturally higher demand for US dollar assets) will likely be losing their market share of Japanese savings. Thirdly, the recent historical trend has been that the Japanese institutions have anyway acted rationally in that they have been larger buyers of US debt when the dollar has been weak, not when it has been strong. It would be irrational for them to now act in a way which would hinder the trade adjustment process.

TAIWAN

A CONTRACTING TRADE SURPLUS SHOULD PERMIT THE CENTRAL BANK TO REDUCE MONETARY GROWTH

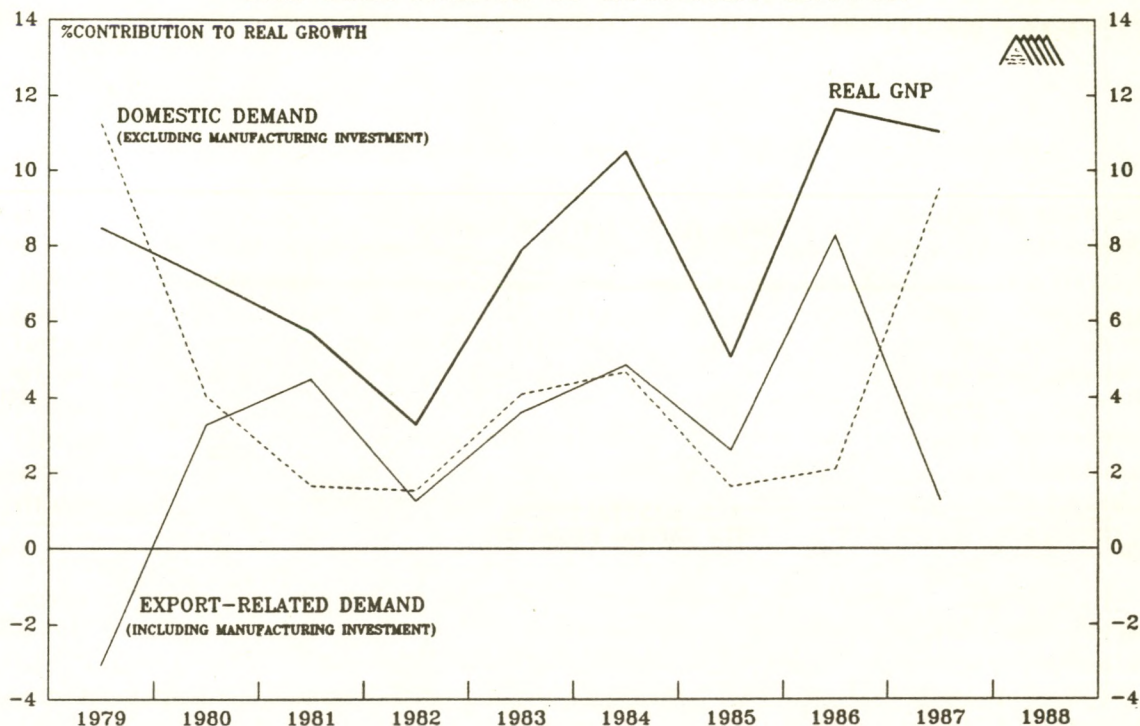
During 1987 the Taiwanese economy underwent a significant transition away from externally generated growth towards domestically led growth. For the year as a whole, real GNP growth held at very close to the levels achieved in 1986, at over 11%. However, in contrast to 1986 this rapid rate of economic growth was achieved without the aid of a positive growth contribution from net exports. Even when investment in Taiwan's primarily export-oriented manufacturing sector is included, growth in broadly-defined externally-related demand (net exports plus manufacturing investment) contributed only 1.3% to the annual growth of GDP. On the other hand, domestically-generated growth (consumer spending, government spending and non-manufacturing investment) contributed a large 9.8% to economic growth, up from a contribution of only 3.4% in 1986. This dramatic shift in the expenditure sources of economic growth is illustrated in Chart 1.

Although Taiwan's trade balance declined slightly in real terms, in value terms the overall current account surplus increased further, albeit by a relatively modest (in relation to recent annual increases) US\$1.96 billion, to US\$18.17 billion. When seen in terms of the positive savings/investment gap (shown in Chart 2) it can be seen that the stabilisation of the current account surplus was not the result of any slowdown in the growth of Taiwan's savings, which in line with the growth of the overall economy, continued to grow at at least their trend rate of increase. Rather it was the result of a sharp rise in gross domestic investment, bringing to an end a five year period of stagnant capital spending. The sharp increase in investment (gross fixed capital formation posted real growth of 17.9% for the year) occurred primarily in the non-manufacturing sector (Chart 3), reversing a four year slump in this investment. Investment in the key domestic sectors of wholesale and retail trade, transport and communications, utilities and construction showed huge increases of 49.8%, 31.3%, 23.1%, and 30.2% respectively. (These are nominal increases but because of the negligible increase in the fixed capital formation deflator, the real growth rates would be little different).

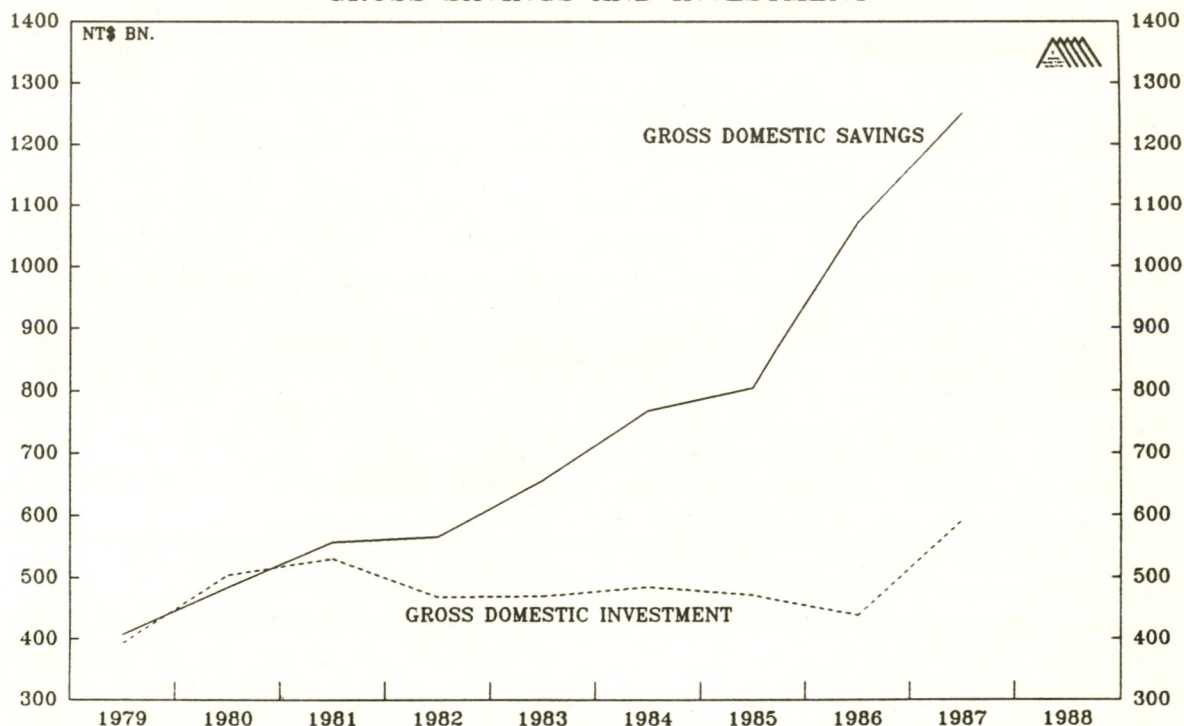
Growth in this investment formed the significant part of the sharp increase in domestically-related demand illustrated in Chart 1. However, it is also of potentially longer-term significance. As discussed in a previous AMM article (AMM Vol. 11 No. 2), growth in these areas has previously been suppressed as a result of regulations and restrictions, leading Taiwan to become overly dependent on its manufacturing export sector. Thus the resurgence of domestically-related investment in 1987 can be seen as an indication that the ongoing gradual liberalisation of Taiwan's economy is paving the way for more balanced economic growth. In particular, 1987 saw a comparatively high level of activity in property development, both commercial and residential, and, following large import tariff reductions, the entry of a number of foreign department stores, markedly increasing the availability of consumer goods.

When considered in terms of merchandise trade rather than the

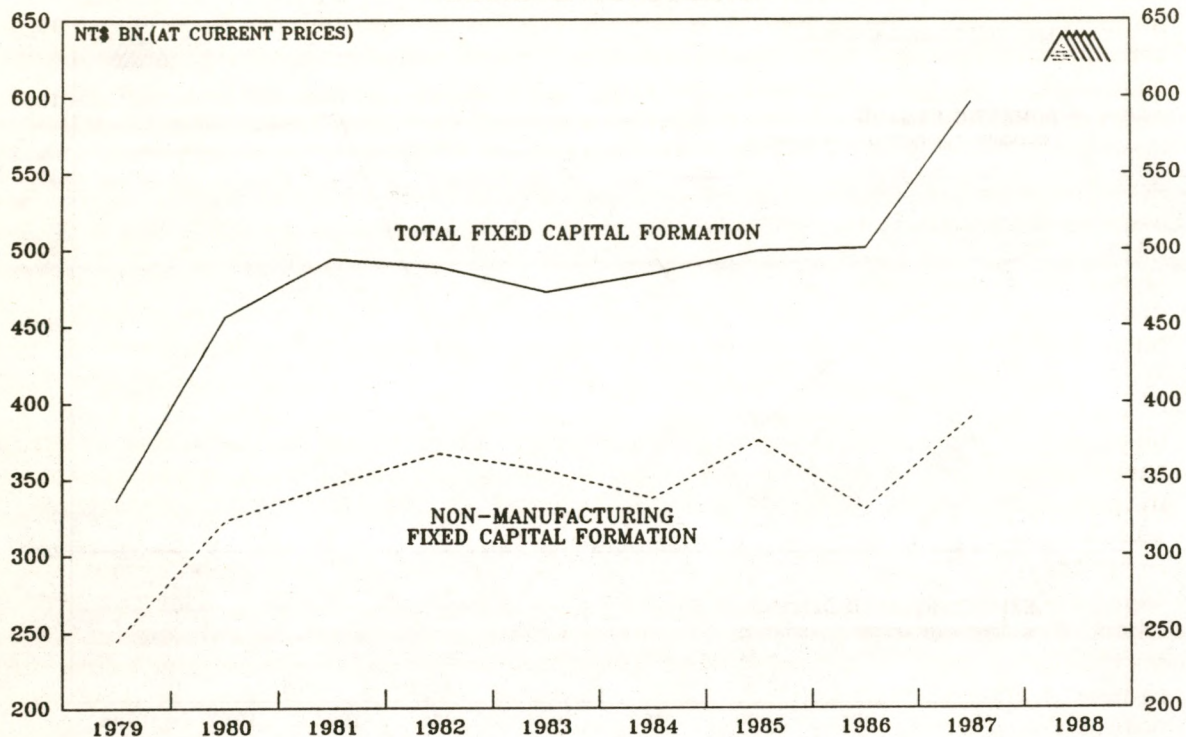
TAIWAN: CHART 1
THE COMPONENTS OF ECONOMIC GROWTH



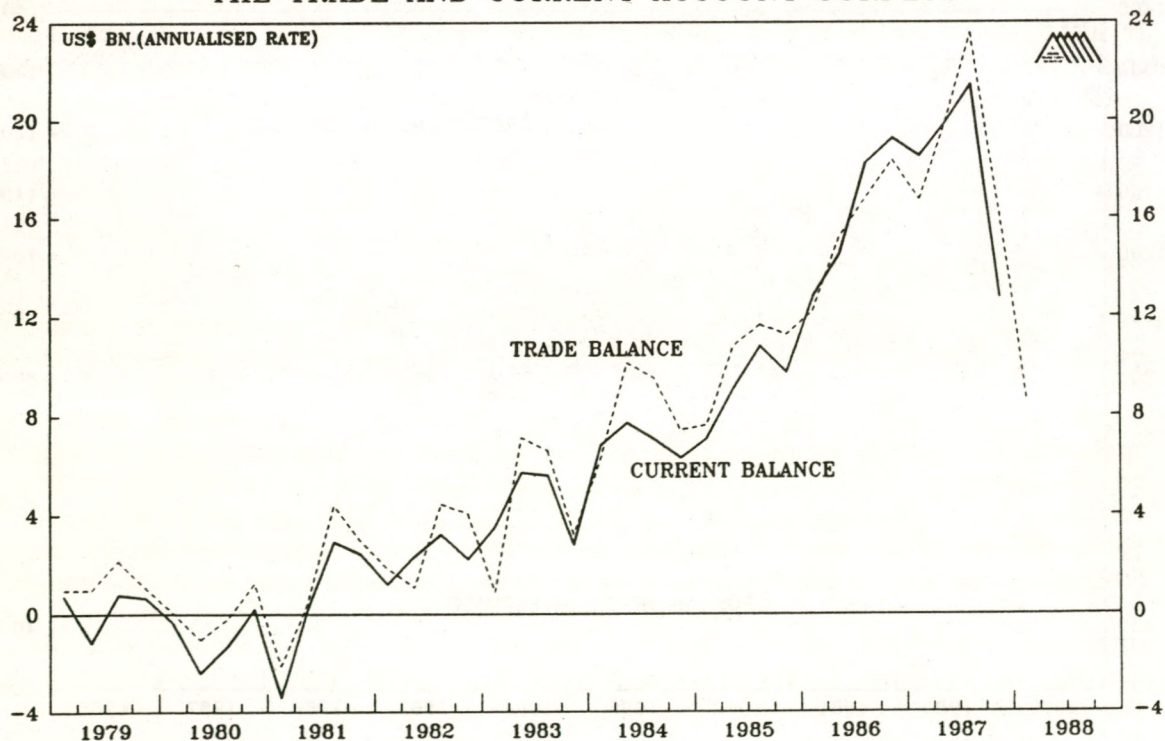
TAIWAN: CHART 2
GROSS SAVINGS AND INVESTMENT



TAIWAN: CHART 3
FIXED INVESTMENT



TAIWAN: CHART 4
THE TRADE AND CURRENT ACCOUNT SURPLUS

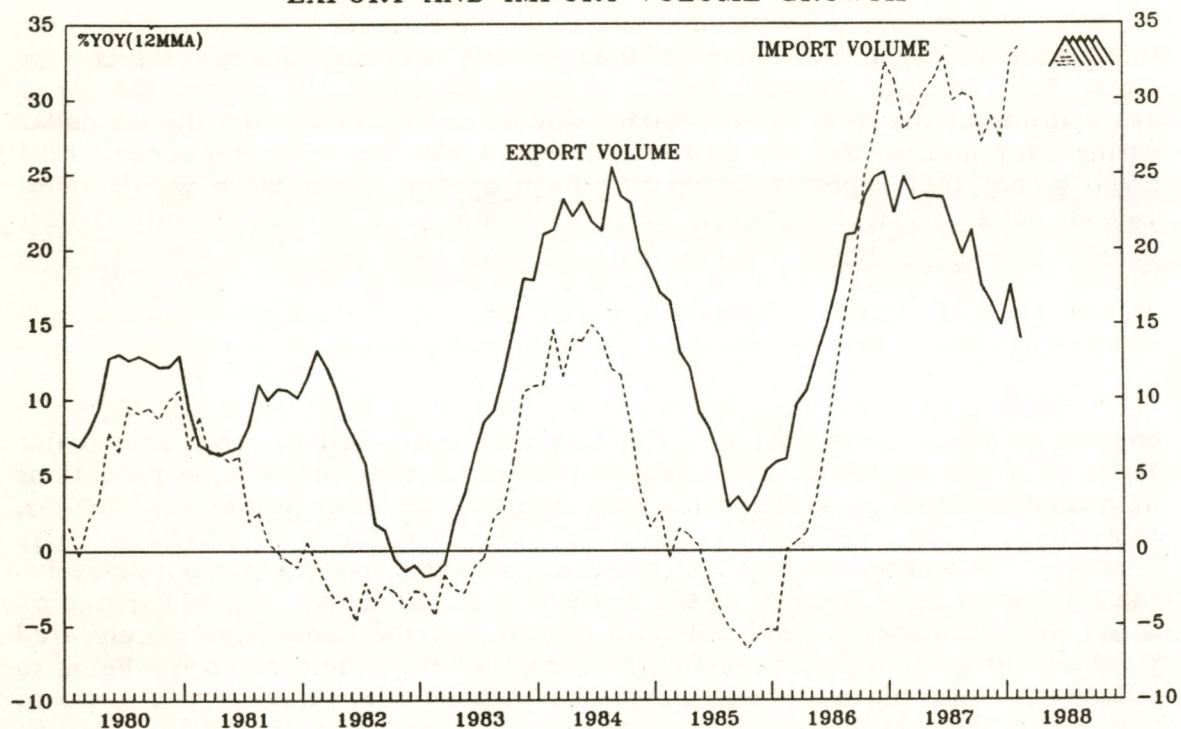


savings/investment imbalance, the stabilisation of Taiwan's current account surplus in 1987 (see Chart 4) can be seen to have been the result of a surge in imports. Export volume growth continued at a fairly rapid, albeit declining, pace throughout the year but import volume growth was significantly faster (see Chart 5). Because Taiwan's trade is denominated in US dollars the sharp appreciation of the New Taiwan dollar (which rose by 24% against the US dollar during 1987 and by the end of the year stood 42% above its September 1985 level) means that export and import growth appears lower when seen in New Taiwan dollar terms. However, even when measured in New Taiwan dollars imports still grew by a strong 20.1% for the year 1987 as a whole (see Chart 6). During the first quarter of 1988 imports spurted further to show a year-on-year growth rate of 32.3%. When translated into US dollars this represents a phenomenal annual rate of growth of 61.7% for the quarter.

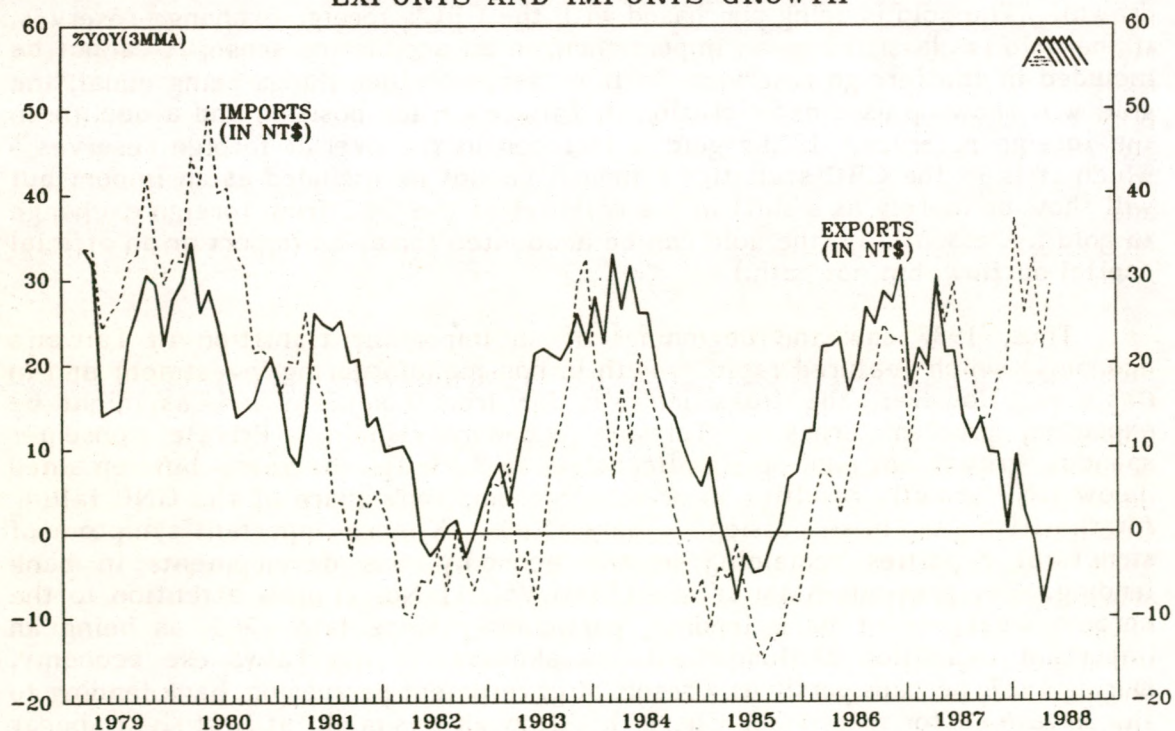
Rapid growth in imports can be attributed at least partly to Taiwan's ongoing economic liberalisation. The past year-and-a-half has seen four major tariff reduction packages, the broadest in scope involving significant reductions in import tariffs on 3,500 items including consumer durables such as automobiles, televisions, VTRs and home appliances, which became effective in early February. This large scale tariff reduction was probably the major reason for the further surge in imports during the first quarter of this year illustrated on Chart 6. A second, widely-publicised reason was the authorities' accelerated purchases of gold, largely imported from the US with an important aim being to reduce Taiwan's bilateral trade imbalance with the US. However, it is worth noting that although these gold purchases - which totalled roughly US\$1.5 billion in the first quarter - are classified as imports in Taiwan's customs statistics they will not be so classified in the Central Bank of China's (CBC) final balance of payments data (from which the current account data shown in Chart 4 is drawn). (The gold is being purchased with the CBC's foreign exchange reserves. If the gold is classified as an import then, in an accounting sense, it cannot be included in the foreign reserves. In this case, all other things being equal, the gold will show up as a deterioration in Taiwan's trade position and a decline in the foreign reserves. If the gold is included in the overall foreign reserves - which it is in the CBC statistics - then it cannot be included as an import but will show up merely as a shift in the reserves of the CBC from foreign exchange to gold i.e. essentially, the gold can be accounted for as an import or an official capital outflow, but not both.)

Thus, 1987 saw the beginnings of an important transition in Taiwan's economy, which featured rapid growth in non-manufacturing investment and in imports. However, the transition was far from complete and, as might be expected, problem areas in Taiwan's economy remain. Private consumer spending growth did pick up significantly - to 8.6% for the year - but remained below GNP growth, resulting in private consumption's share of the GNP falling for the fifth year in succession, to only 45.4%. A more important symptom of structural rigidities remaining in the economy was developments in bank lending. The previous AMM article (AMM Vol. 11 No. 2) drew attention to the chronic weakness of bank lending, particularly since late 1983, as being an important indication of fundamental weaknesses in the Taiwanese economy. During 1987, perhaps partly as a result of government persuasion, bank lending to the private sector soared (see Chart 7). Although this might at first sight appear to be positively related to the resurgence of non-manufacturing investment, in

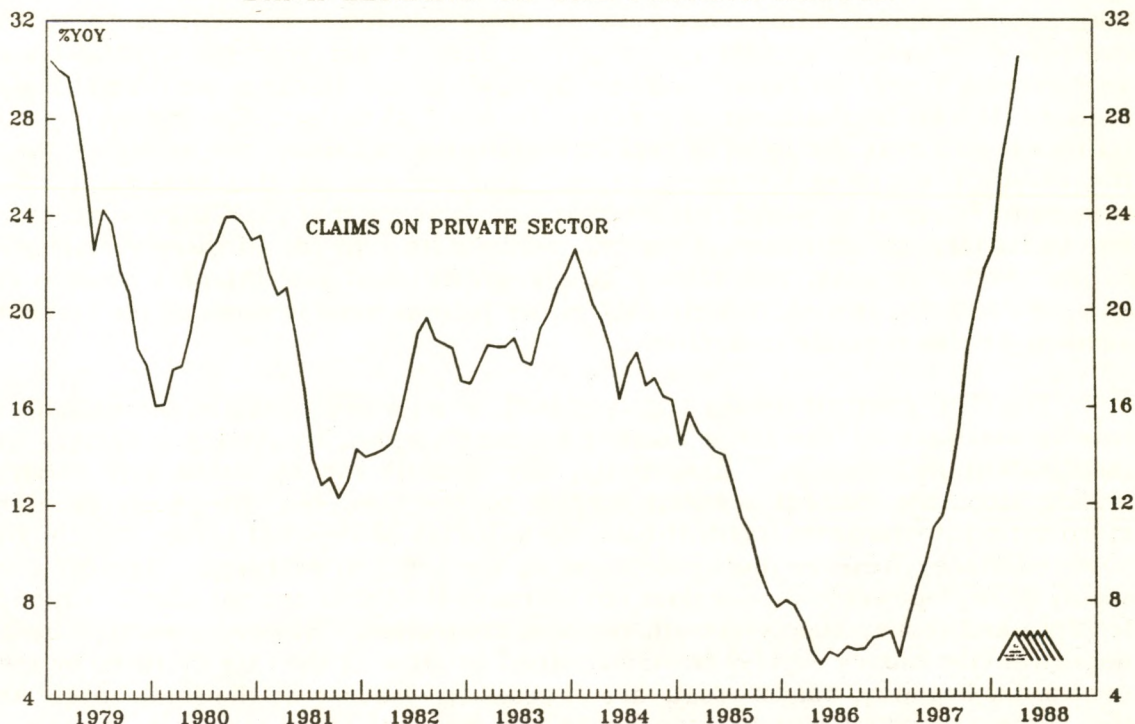
TAIWAN: CHART 5
EXPORT AND IMPORT VOLUME GROWTH



TAIWAN: CHART 6
EXPORTS AND IMPORTS GROWTH



TAIWAN: CHART 7
BANK LENDING TO THE PRIVATE SECTOR



fact the bulk of new bank lending was related to the boom in the stock and real estate markets. Non-manufacturing fixed capital investment was financed largely from outside the official banking sector. Since the end of 1986 Taiwan's stockmarket has risen five-fold, while last year prices for commercial and residential property rose by two to three times in the major cities, with land prices in Taipei up by more than three times. In some senses the boom in stock and real estate prices and the associated surge in bank lending are indicative of the remaining inflexibilities and structural rigidities within Taiwan's economy and financial sector, which provides only limited outlets for private savings and hinders intermediation between those savings and private sector investment (see AMM Vol. 11 No. 2).

However, the stabilisation of the current account surplus has had one important effect in that it has imparted more flexibility to the conduct of the CBC's monetary policy. The CBC should now be better placed to conduct monetary policy in a non-inflationary way most conducive to the continued development of Taiwan's domestic economy. Previous AMM articles have discussed the monetary problems posed by the huge current account surplus, CBC's sterilisation policy and the potential implications for the 'crowding out' of bank lending to the private sector. In essence, these arguments can be summarised as follows: The CBC attempts to manage three variables - the exchange rate (for the benefit of exporters), the money supply (to control inflation) and interest rates (to promote economic development). In a 'normal', unregulated, economy it is usually thought that the central bank can control only one of these variables. However, in Taiwan's case capital flows remain heavily restricted. Although capital outflows have been largely freed since July of last

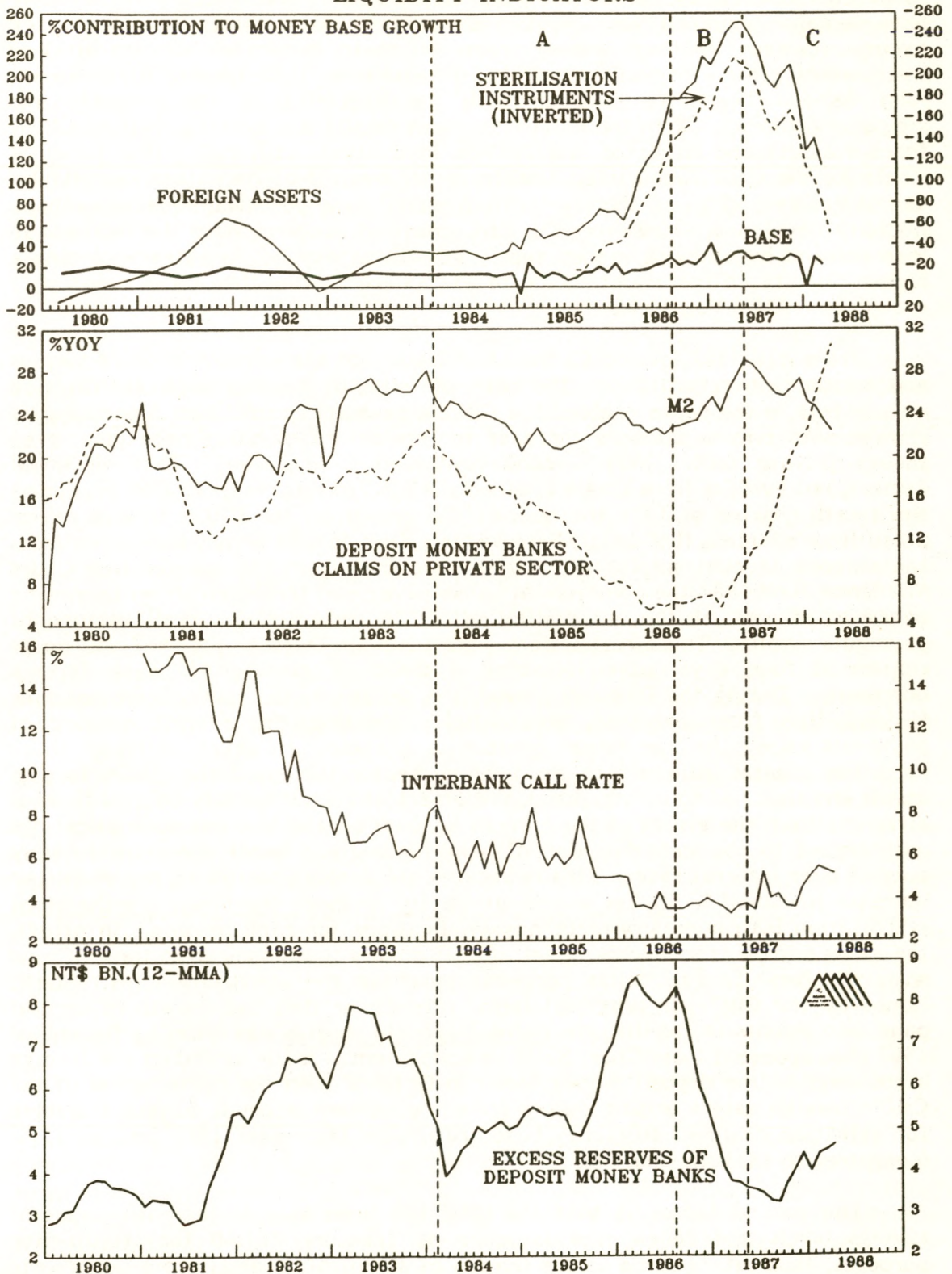
year (since July 15 1987 the public has been able to freely convert local currency up to the equivalent of US\$5 million per year into foreign currencies for overseas investment) capital inflows are now severely limited. In addition to strict controls on non-bank capital inflows, from June 2 last year the central bank announced a freeze on banks' overseas borrowings and at the same time sharply reduced its own commitment to purchase forward US dollars. Control on capital inflows means that the level of real interest rates in Taiwan can be higher than the level of world real interest rates. The removal of this constraint (the constraint imposed by world real interest rates) means that the CBC can achieve two of its targets. However, it can only achieve its aims for all three variables - a 'low' exchange rate, low money supply growth and low interest rates - if another condition is met, namely that either loan demand is weak or the current account surplus is stable or declining.

The CBC controls money supply growth, even while managing the exchange rate in the face of the large current account surplus, by issuing a variety of sterilisation instruments. Essentially, the deposit money banks sell dollars arising from the current account surplus to the CBC but ultimately receive sterilisation instruments (central bank certificates of deposit) rather than high-powered money (reserve money deposits at the CBC) in exchange. Because the supply of high-powered money does not increase the banks are not able to expand lending, and money supply growth remains controlled. However, because bank liabilities (the money supply) are constrained to grow at the rate dictated by the central bank policy, banks' assets are necessarily growing at the same rate. As the current account surplus (and hence the issue of sterilisation instruments) grows larger and larger, more and more of those assets will necessarily constitute sterilisation instruments and a decreasing amount of new bank funds will be available for lending to the private sector. This process should be expected to result in rising interest rates, which is why the policy is not possible to conduct for long without the aid of exchange controls.

The central bank will then only be able to keep interest rates low and stable if private sector loan demand is naturally weak, or alternatively, the current account surplus is not rising so rapidly as to make the absorption of sterilisation instruments by the banks a problem. In short, if the growth of banks' assets is constrained to a certain rate by the central bank's monetary policy, interest rates will only be kept 'low' for as long as the demands for those assets (the two most important components of which are the sterilisation instruments - linked to the current account surplus - and private sector loan demand) are growing at a rate consistent, or lower, than that rate of growth. Otherwise, interest rates will be tending to rise, or, if the central bank first and foremost desires to keep interest rates low and stable, money supply and bank asset growth will have to be allowed to rise.

Three distinct periods can be discerned in the conduct of the CBC's monetary policy over the past four years and these are indicated on Chart 8, by the letters A, B and C. During period A, which ran roughly from the beginning of 1984 to mid-1986 the CBC was comfortably able to achieve its objectives of maintaining an undervalued exchange rate (the New Taiwan dollar rose by only 6.2% between September 1985 and July 1986 compared to, for example, a 56% appreciation of the yen over the same period) while keeping M2 growth at a fairly steady 21%-24% growth rate and interest rates declining, even as the

TAIWAN: CHART 8 LIQUIDITY INDICATORS



current account surplus, and hence the CBC's issues of sterilisation instruments rose. This was because, as the second panel on Chart 8 illustrates, private sector loan demand remained very weak and banks found themselves with growing excess reserves (bottom panel) even as their purchases of sterilisation instruments grew. Beginning roughly in September 1986 (period B), however, loan demand began to pick up with the beginning of the property and stockmarket boom. With the current account surplus and hence growth of CBC's foreign assets and issues of sterilisation instruments still rising (top panel of Chart 8), the CBC found itself unable to achieve all of its objectives. Banks' excess reserves dropped sharply (bottom panel) as a potential squeeze on bank liquidity developed. However, the CBC chose to accommodate the increase in loan demand by allowing money supply growth to expand, in essence placing a higher priority on the maintenance of low interest rates than on money supply growth (see AMM Vol. 11 No. 5).

From mid-1987 (period C) the stabilisation of the current account surplus and consequent reduction in the rate of issue of central bank sterilisation instruments to the banks enabled the CBC to reassert control over money supply growth with only a minimal increase in interest rates being necessary, even though private sector loan demand continued to increase. Two additional factors, not evident from Chart 8, aided the CBC in this respect. Firstly, during the fourth quarter of 1987 the bulk of the growth in the CBC's foreign assets arose from overseas (US dollar) borrowings by the deposit money banks, not from the current account surplus which fell quite sharply in the quarter (see Chart 4). Since June 1987 the commercial banks have been forbidden from borrowing overseas as part of the authorities' effort to reduce the overall balance of payments surplus. These restrictions were lifted on October 1st 1987 only to be reimposed four days later following a flood of commercial bank foreign borrowing. During the four day period, the deposit money banks borrowed over US\$5 billion from overseas, substantially boosting the overall balance of payments surplus for the fourth quarter as a whole. However, although these large net capital inflows into the banking sector increased the CBC's foreign assets and thus had to be sterilised, the effect of such monetary capital flows is different from the effect of the current account surplus and has no implications with regard to the 'crowding out' of bank lending and hence the central bank's control over interest rates. This is because the foreign borrowing represents an increase in banks' liabilities which ultimately finances the banks' purchases of sterilisation instruments without any implications for bank lending. In effect, the banks borrow from overseas, sell the US dollars thus acquired to the CBC and with the New Taiwan dollar proceeds purchase the sterilisation instruments issued by the CBC. In practical terms this means that the growth of central bank instruments to sterilise the current account surplus was lower by the end of 1987 than apparent from Chart 8. If an adjustment is made to deduct the foreign borrowings of the deposit money banks in October then the contribution of the CBC's foreign assets arising purely from the current account surplus (adjusted for valuation changes) to money base growth for December 1987 falls to 151% (compared to 181% in Chart 8).

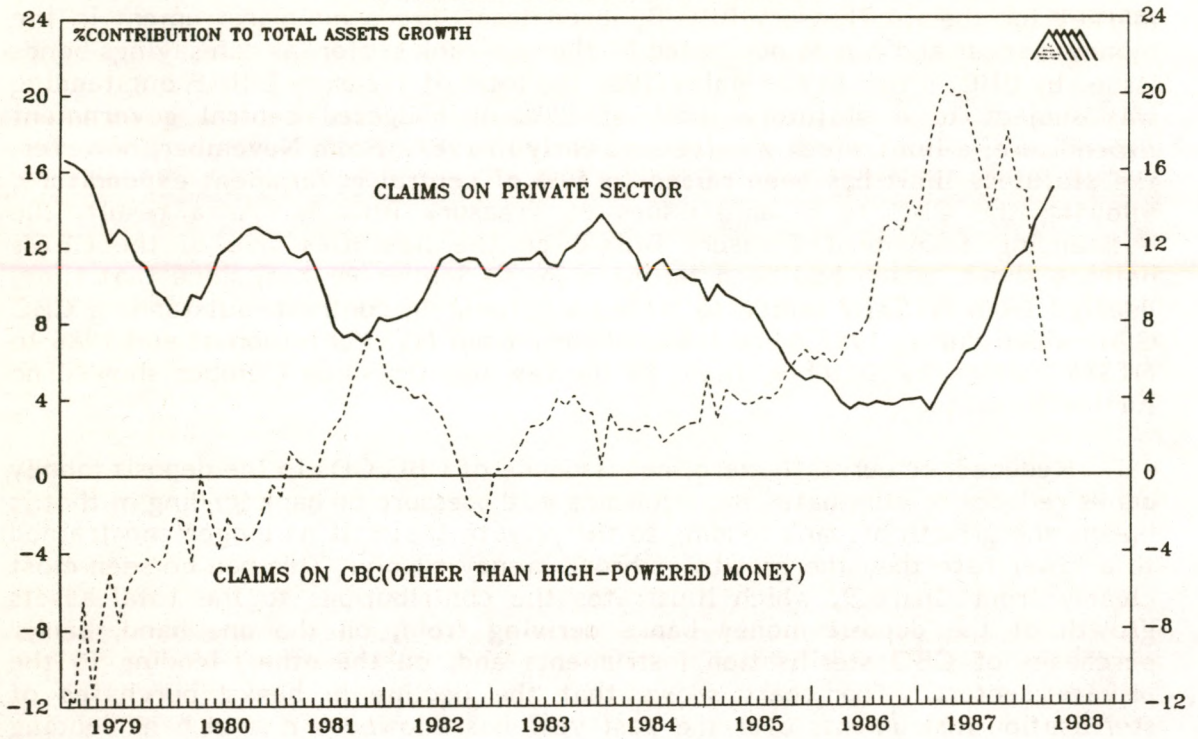
The second factor is that the CBC has been able to increase issues of savings bonds and renew new issuance of Treasury Bills-B for sterilisation purposes, thus taking some of the burden of sterilisation away from certificate of deposit issuance. A significant distinction between the classes of instrument

is that purchases of central bank certificates of deposit are limited to banks which maintain a reserve account at the CBC and there is a limited secondary market for them. Treasury Bills-B, in contrast, are a main instrument in the money market and can be purchased by the non-bank sector, as can savings bonds issued by CBC. Prior to November 1987 the total of Treasury Bills-B outstanding was subject to a statutory limit of 25% of budgeted central government expenditure, a limit which was reached early in 1987. From November, however, the statutory limit has been raised to 50% of central government expenditure, allowing the CBC to resume issues of Treasury Bills-B. As a result, the outstanding amount of Treasury Bills-B on the liabilities side of the CBC's balance sheet, which had been falling prior to September has, since that time, doubled from NT\$31.7 billion to NT\$63.4 billion. In contrast, outstanding CBC CDs, which during 1987 more than doubled, from NT\$399 billion at end 1986 to NT\$842 billion by October, have, in the few months since October showed no further increase.

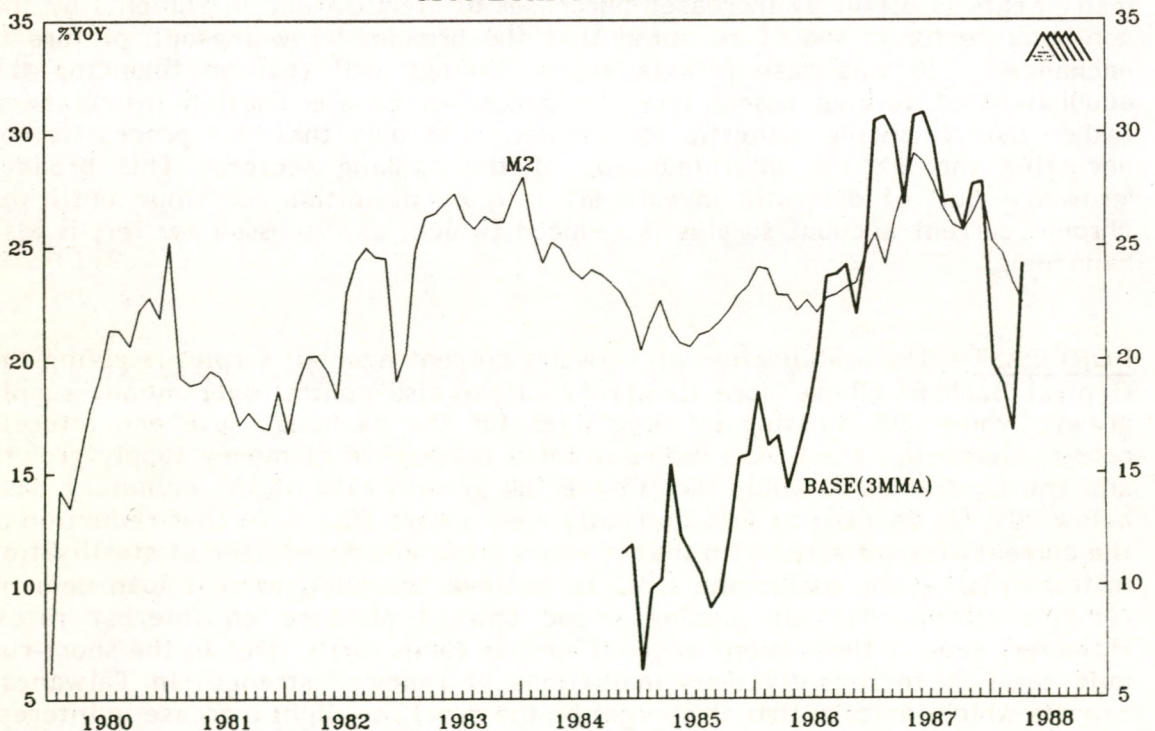
Reduced, or currently zero, net issuance of CBC CDs to the deposit money banks reduces or eliminates the 'crowding out' pressure on bank lending in that it means the growth of bank lending to the private sector is no longer constrained to a lower rate than the growth of broad money supply. This can be seen most clearly from Chart 9, which illustrates the contributions to the total assets growth of the deposit money banks deriving from, on the one hand, banks' purchases of CBC sterilisation instruments and, on the other, lending to the private sector. The chart shows that the decline in banks' purchases of sterilisation instruments over the past year has allowed a rise in bank lending growth without this being associated with an increase in the overall rate of growth of banks' assets and broad money supply (banks' liabilities). Nevertheless, in so far as a decline in the banking sectors' purchases of sterilisation instruments is offset by increased purchases of sterilisation instruments by the non-bank sector it should be noted that the broader 'crowding-out' picture is unchanged. In this case private sector savings will still be financing the acquisition of foreign assets (via the purchases of sterilisation instruments) rather than financing domestic investment, it is only that this process is not occurring through the intermediation of the banking sector. This broader 'crowding out' of domestic investment will, by definition, continue until the chronic current account surplus is reduced (which, as discussed earlier, is also happening).

FORECAST: The stabilisation of Taiwan's current account surplus is giving the Central Bank of China more flexibility to exercise control over money supply growth while still meeting its objectives for the exchange rate and interest rates. Currently, the CBC's desire is for a lower rate of money supply growth and the central bank would like to see the growth rate of the monetary base below 20% (as opposed to 22% currently - see Chart 10). A further reduction in the current account surplus (in that it would allow a reduced issue of sterilisation instruments) would enable the CBC to achieve this aim, even if loan demand remains strong, without placing undue upward pressure on interest rates. However, even if the current account surplus temporarily rises in the short-run (and there have recently been indications of renewed strength in Taiwanese exports which indicate that this might be the case) the slight increase in interest rates recently (see Chart 8) suggests that the CBC may have reversed its order

TAIWAN: CHART 9
COMMERCIAL BANKS ASSETS



TAIWAN: CHART 10
MONETARY GROWTH

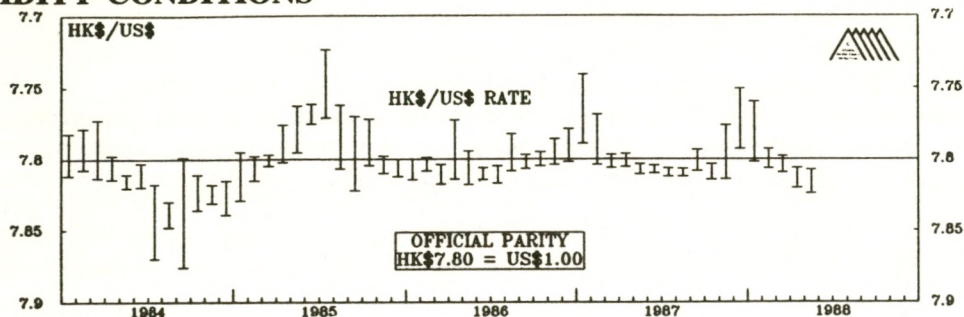


of priorities between interest rates and money supply growth compared to last year and may now be prepared to allow interest rates to rise if that proves necessary to reduce the rate of money supply growth.

The CBC's overwhelming priority remains the stabilisation of the New Taiwan dollar/US dollar exchange rate, particularly so now that the strict limits imposed on banks' foreign borrowings have effectively shut down the swap/forward market in the New Taiwan dollar and thus left exporters with no means to hedge US dollar revenues. The authorities' desire to limit the suffering of exporters means that by eliminating hedging opportunities (in the effort to stem capital inflows) the CBC has implicitly committed itself to the maintenance of a stable exchange rate for the Taiwanese currency. However, it seems most likely that the full adverse impact on Taiwan's competitiveness of the sharp appreciation of the NT dollar over the past two years has yet to be felt on exports, and given also the weakening trend expected for the US economy (see accompanying article, on Japan, page 1), Taiwan's exports could weaken significantly in the longer run. Given that domestic demand should remain firm the longer run trend should therefore be for a continued reduction in the current account surplus at current exchange rates.

Although the domestic recovery which began late in 1986 is still patchy to an extent that reflects over-regulation of the economy, the on-going liberalisation of the economy has clearly already produced major benefits and, as evidenced by the generally broadly-based strength in non-manufacturing investment, domestic demand growth has already achieved a momentum of its own. Some tightening in monetary conditions by the CBC, in that it would reduce the risks of rising inflation, should be seen as beneficial, rather than detrimental, to continuing domestic economic recovery in Taiwan.

HONG KONG: RISING INTEREST RATES REFLECT TIGHTENING LIQUIDITY CONDITIONS

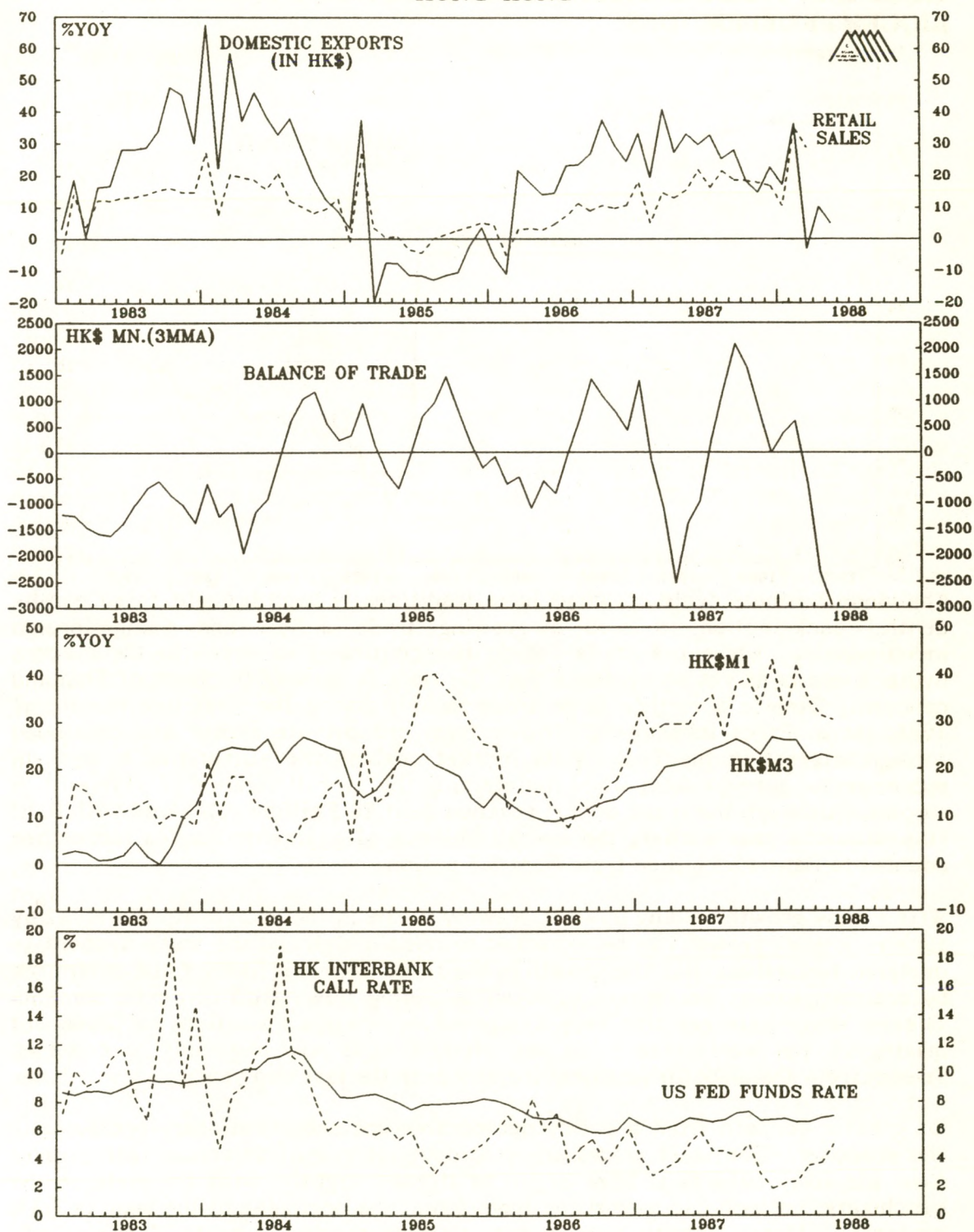


Liquidity conditions are continuing to tighten as a result of unfavourable developments on the balance of payments. The decline in domestic export growth and the resultant deterioration in the trade account, along with an unwinding of speculative capital inflows in response to receding expectations of a revaluation of the Hong Kong dollar, has resulted in the currency moving to a small discount against its official link rate since March, while money growth is slowing. During the first four months of 1987 domestic export growth slowed to 13.5% compared with a 26.8% gain during the whole of 1987. Over the same period the trade deficit was only marginally higher than 1987 levels at HK\$5.2 billion compared with HK\$5 billion a year earlier, but the situation deteriorated markedly towards the end of the period with the April trade deficit of HK\$3.4 billion double that of April 1987. By mid-June the Hong Kong dollar was trading at HK\$7.805, or a 0.1% discount to the link rate, compared with a 0.8% premium at its peak in mid January. The year-on-year rate of growth in HK\$M3 was 23% in April compared with a peak of nearly 27% in December. With loan demand remaining strong interest rates have also begun to rise. By mid June the overnight interbank rate had reached 7%, having been at zero earlier in the year, while the Hong Kong Association of Banks raised the prime lending rate in successive steps from a low of 5.25% to 8.5%.

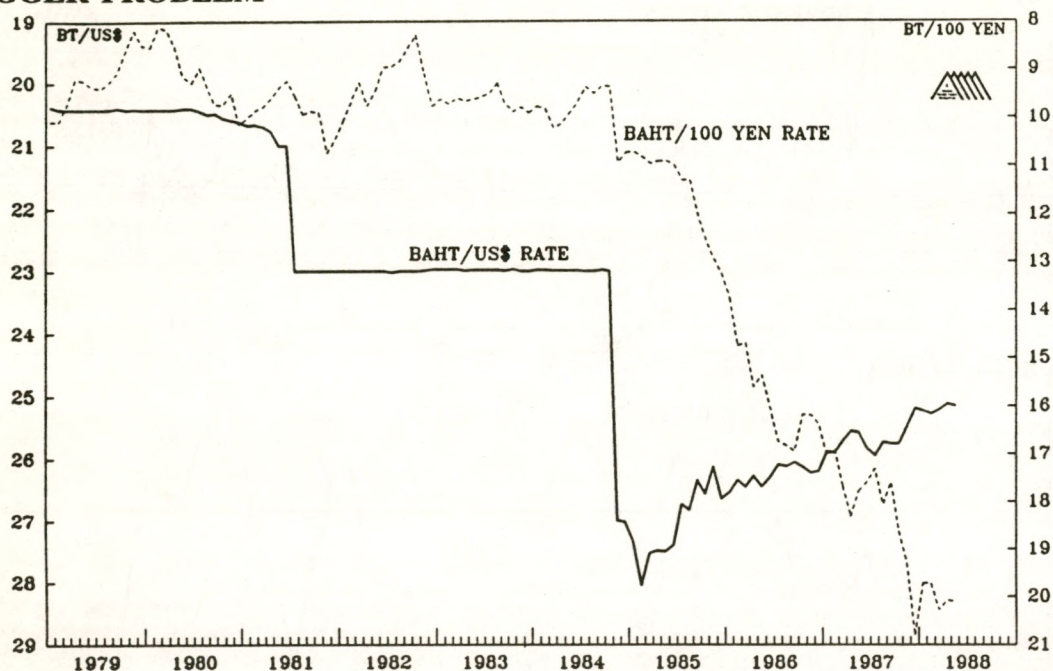
However, the slowdown in money growth has yet to be reflected in weaker domestic demand growth. Consumer spending continues to remain very strong, buoyed by big gains in personal disposable incomes, resulting from very tight labour markets, and the wealth effects of buoyant property prices. At the same time inflation is accelerating, with consumer prices rising by 7.7% year-on-year in April. In the months ahead inflation is likely to rise further, reaching 10% before the year-end, as slower export growth and tight labour markets combine to raise unit wage costs. This is likely to be reinforced by the transmission of inflationary pressures from China, particularly in respect of food prices. Previously the slight depreciation of the Renminbi against the Hong Kong dollar had helped to contain inflationary pressures in Hong Kong.

But inflation seems unlikely to get out of hand. Money growth should continue to slow and interest rates to rise, as the climb in unit wage costs erodes much of the earlier competitive gains for exporters. The composition of Hong Kong's export base, with a heavy reliance on consumer goods, should reinforce this process. The late stages of the international business cycle are typically more helpful for exporters of capital rather than consumer goods. The impact of these developments on money growth should combine to reduce inflationary pressures considerably in 1989.

HONG KONG



THAILAND: TRADE DEFICIT WIDENS, BUT INFLATION IS THE BIGGER PROBLEM

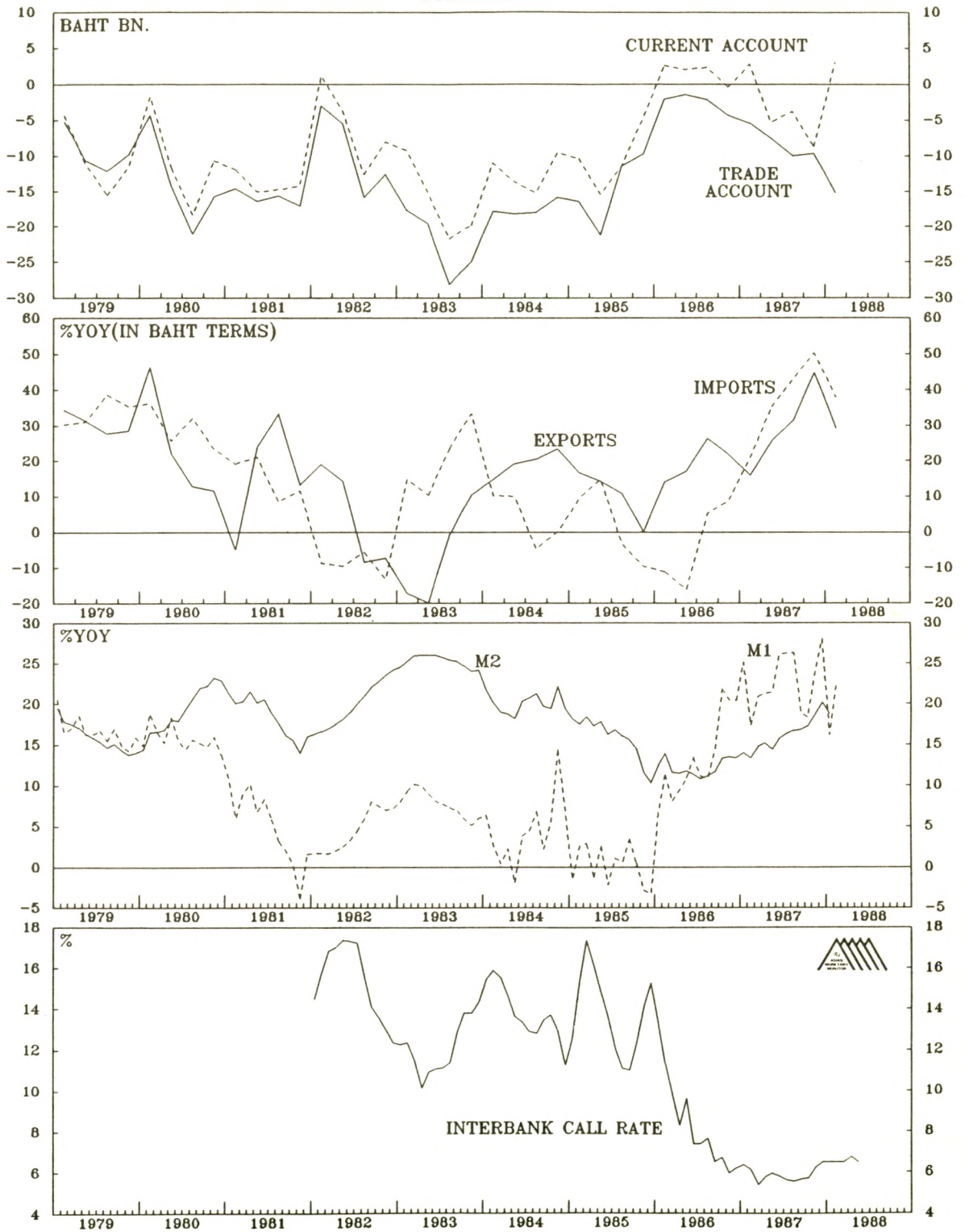


Thailand's business cycle upswings have traditionally been brought to an end by central bank action to curb a growing trade deficit and rising foreign indebtedness. While the trade deficit has continued to widen in the current cycle, there is as yet no evidence that the issue is causing the Bank of Thailand concern. Despite a further large trade deficit during the first five months of 1988, large direct investment inflows from the private sector and continued foreign interest in the Thai equity market enabled the authorities to redeem public sector foreign debt, while maintaining the overall balance of payments in surplus. Although the trade deficit reached Baht 26.5 billion compared with Baht 10.6 billion a year earlier, the overall balance of payments surplus more than doubled to Baht 19.3 billion from Baht 8.5 billion.

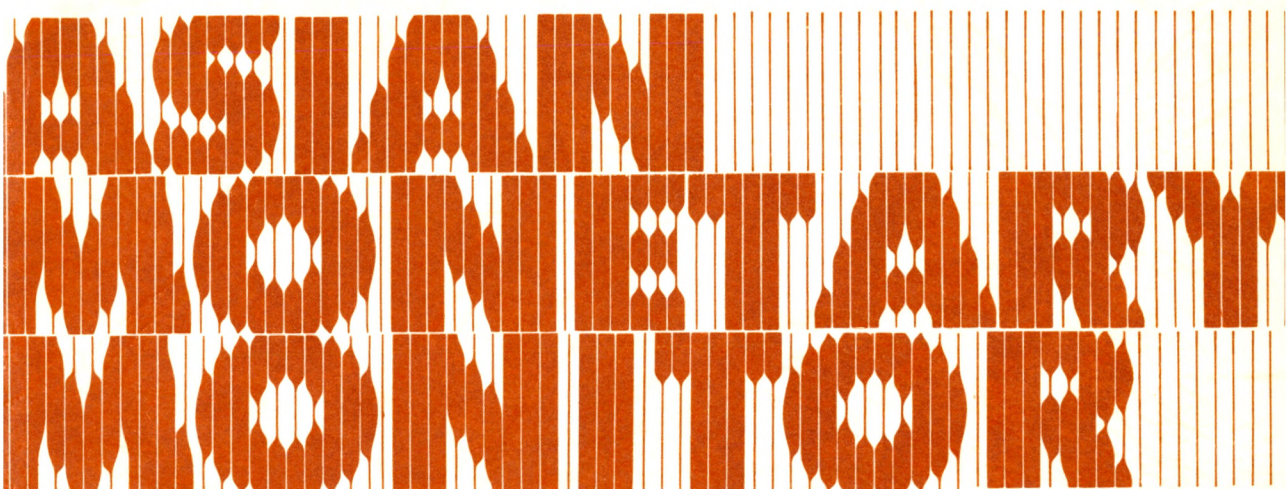
With money growth holding up - M1 grew by 21.3% in the year to April and M2 by 18.5% - import growth can be expected to remain high and the trade account to deteriorate further. But the growth in the trade deficit is likely to be minimised by a strong export performance, notwithstanding slowing US domestic demand. The exchange rate remains very competitive, drought conditions in China are driving up the world rice price and production is now beginning to come on stream from the direct investment inflows over the last two years.

Of greater concern from a policy perspective are the inflationary pressures in the economy. Consumer prices are continuing to rise at an annual rate of over 4%. Liquidity conditions have begun to tighten slightly, with the yield on the benchmark 3 month Citinote rising from 6% at the beginning of the year to 7.8% currently. Money growth also appears to have reached a peak. While it will continue to remain at high levels, owing to a rise in the net foreign asset component of the monetary base, the Bank of Thailand is unlikely to accommodate growing credit demand, thus providing scope for further interest rate rises.

THAILAND







CONTENTS

	Page
HONG KONG:	
Intervention Replaces Arbitrage — The July Package of Monetary Measures	1
by John Greenwood	
JAPAN:	
The Impact of Rising Interest Rates and Financial Deregulation on the Equity Market	21
by Ian MacFarlane	
ECONOMIC CAPSULES:	
Malaysia: As Commodity Prices Rise, Growth Accelerates	IPM 30
South Korea: The Central Bank Steps Up the Pace of Monetary Sterilisation	IPM 32



Asian Monetary Monitor is a
publication of the G.T. group of companies



John G. Greenwood
Publisher
Group Economist
G.T. Management PLC



Tim J. Lee
Editor
Economist
G.T. Management (Asia) Ltd.



Ian P. MacFarlane
Economist
G.T. Management (Asia) Ltd.



Daniel L. Gressel
Economist
G.T. Management (Asia) Ltd.



Sook Yee Li
Statistician



Michael Wong
Graphics



Isabella Ling
Administration

© ASIAN MONETARY MONITOR LTD., HONG KONG 1988

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the editor.

Asian Monetary Monitor is a bimonthly publication specialising in the analysis of economies along the Asian Pacific Rim. Sold by subscription only, price US\$200 p.a. inclusive of air mail delivery to any part of the world. Correspondence and subscriptions should be addressed to the Editor, Asian Monetary Monitor Ltd., GPO Box 12964, Hong Kong.

ASIAN MONETARY MONITOR

July - August, 1988

Vol. 12 No.4

HONG KONG: INTERVENTION REPLACES ARBITRAGE — THE JULY PACKAGE OF MONETARY MEASURES

Introduction

On Friday 15th July, the Hong Kong Government announced some radical changes to Hong Kong's monetary system to be made effective from Monday 18th July. Their introduction represents a major change in the role of the Exchange Fund on the one hand and the role of the Hong Kong and Shanghai Banking Corporation (HSBC) on the other. The changes convert the Exchange Fund from a passive issuer of currency in the style of a traditional colonial currency board to a potentially active force in the money and foreign exchange markets since they provide to the Exchange Fund some critical new elements in its balance sheet which together constitute the essentials of a central bank.

With respect to the operation of the monetary system, the changes herald a shift from dependence upon private sector arbitrage to dependence upon official intervention as a device for ensuring stability of Hong Kong's exchange rate. So far as the role of the HSBC is concerned, some of the privileges which it previously enjoyed have been removed but the changes still leave HSBC an important role as agent of the Government in certain specific respects.

On the whole, the linked rate system was operating reasonably well with deviations of the free market exchange rate from the official HK\$7.80 = US\$1.00 parity generally being contained within a band of 1% on either side of the 7.8 rate. Unfortunately, the variability in the free market rate tended to prompt occasional speculation that Hong Kong's official parity might be altered. This in turn led to some wide fluctuations in Hong Kong's short term interest rates. Analytically, there were two ways to deal with this problem. In an earlier issue of AMM (Jan.-Feb. 1988, Vol. 12 No. 1: "How to Tighten Up the Linked Rate Mechanism") we advocated improving the arbitrage mechanism, for example by making the official 7.80 parity available to the non-bank public for the purchase and sale of banknotes, or by making bank notes convertible into clearing account deposits of the banks and vice versa. An alternative approach was for the Exchange Fund to intervene more effectively in the foreign exchange and money markets. To make that intervention effective it would have been necessary to make a number of changes in the balance sheet of the Exchange Fund in order to enable it to act like a central bank. This is in fact what has now been done.

In terms of results, we expect that the new arrangements will be highly effective in reducing the deviation of the free market exchange rate from the official parity, but it is doubtful if under these arrangements it is appropriate to continue to describe Hong Kong's exchange rate mechanism as a linked rate.

Private arbitrage may still play a role, but if intervention takes over as the primary means of minimising the gap between the free market rate and the parity, the system is more accurately described as a pegged rate rather than a linked rate.

Changes Introduced by the New Accounting Arrangements

The new arrangements have been billed as mere changes in the "accounting arrangements" between the Exchange Fund and the HSBC. In reality they are more significant and fundamental than this. In order to see why the change in the arrangements marks a decisive departure from the past, it is necessary to set out the changes in some detail.

The first change is the creation on 18th July at the Exchange Fund of a Hong Kong dollar account for HSBC which is a liability of the Exchange Fund. One of the unique features of Hong Kong's banking system from 1935 until July 1988 was that the Exchange Fund had always been a customer of the banking system, holding Hong Kong dollar deposits (as an asset) at HSBC and at other banks. This was in contrast to the typical arrangement in other banking systems where private banks hold deposit liabilities at a central bank. According to the Government's press release (see appendix) HSBC will now maintain a Hong Kong dollar account ("The Account") with the Exchange Fund, and it will be required to maintain a balance in that account no less than the net clearing balance (NCB) of the rest of the banking system (see items 7a & b in the appendix). To see the significance of this it is important to understand how the clearing system operates in Hong Kong. The clearing house in Hong Kong is not an independent entity. It exists, so to speak, within the HSBC. Including the Hong Kong Bank there are ten Settlement Banks, and all other banks (sub-settlement banks) must maintain an account with one of the Settlement Banks. Since the clearing house operates as an adjunct to HSBC and HSBC is also the Manager of the clearing house, net credit balances of the Settlement Banks at the clearing house are held as non-interest bearing deposits at HSBC, and net debit balances of Settlement Banks are treated as overdrafts with HSBC, attracting interest charges at the best lending rate plus some margin. In an independent clearing house, by contrast, the manager would have placed any net clearing balances on deposit at competitive rates in the interbank market, using the income to offset its operating costs.

In the new scheme no interest will be paid to HSBC on its credit balances in The Account. However, if the balance in the account falls short of the NCB, HSBC will be obliged to pay interest on the shortfall to the Exchange Fund, and similarly if NCB is in overall debit. In addition the rates of interest payable by HSBC will be the higher of BLR (Best Lending Rate) or HIBOR (Hong Kong Interbank Offered Rate).

Basically these provisions deprive HSBC of the free use, which it previously enjoyed, of the net clearing house credit balances of other banks. They also create a financial incentive for HSBC to meet its new obligation to maintain a balance in The Account equal to the net clearing balance of the rest of the banking system. This means HSBC is now in the same position vis-a-vis the clearing house as other banks. In effect, The Account creates a kind of clearing account for HSBC, which can be credited or debited at the whim of the

Exchange Fund.

Finally, the creation of The Account will enable the Exchange Fund to conduct intervention in the foreign exchange market or open market operations in the domestic money market in a way which overcomes the deficiencies which were apparent under the old structure and which were a material cause of the currency crisis of 1983 (see AMM Jul.-Aug. 1981, pp.15-33, and especially pp. 28-29). The reason is that HSBC's quasi-central banking power derived not so much from its note-issuing privileges as from the fact that most banks maintained an account with HSBC (or with another bank which in turn cleared with HSBC), just as in a central banking system all banks are usually obliged to maintain an account with the central bank. This unique structure meant that HSBC could - within limits - regulate the interbank market in much the same way as a central bank could, extending credit to or withholding credit from other banks in a discretionary manner. The transfer of NCBs to the Exchange Fund not only means HSBC is deprived of the use of the clearing balances, but it also means that HSBC cannot now extend credits to other banks without simultaneously increasing the size of balances that it must maintain at the Exchange Fund. This is because every interbank loan that HSBC makes automatically increases NCBs by an equivalent amount. Furthermore, the Exchange Fund now has on its balance sheet a liability whose size it can determine from day to day by means of transactions with HSBC (or other banks). In summary, the new account for HSBC at the Exchange Fund amounts to the provision of a central banking facility at the Exchange Fund which will enable it - should the authorities choose to use The Account actively - to regulate the level of short term interest rates, to influence the amount of money in the inter-bank market, and more broadly to adjust the overall level of money supply in the economy.

The balance sheets of the Exchange Fund before and after the introduction of The Account are set out in the box on pp. 4-5, together with the balance sheet of a typical central bank.

The second set of changes introduced by the new arrangements involves the creation of a new account at the Exchange Fund for the Treasury. Like the new account of HSBC at the Exchange Fund, the new account for the Treasury is also a liability item on the Exchange Fund's balance sheet. The details of the Treasury's new account are set out in the appendix and in the T-form diagrams on p. 5, but a simplified summary would be that just as the Government in other monetary systems is able to affect the money supply by transferring deposits from the commercial banking system to the central bank (or vice versa), so in Hong Kong's new system the Government will be able to contract or expand liquidity in the system by transferring money balances from the licensed banks to the Exchange Fund and vice versa.

Having set out the key changes which have been introduced by the new "accounting arrangements" it is worthwhile to compare the structure of the Exchange Fund's liabilities with the structure of a conventional central bank. There are in fact very few significant differences from an analytical standpoint.

1. Certificates of Indebtedness. These are issued to HSBC and Standard Chartered Bank by the Exchange Fund and represent the value of the authorised HK\$ note issue. As with banknotes in central banking systems,

SIMPLIFIED BALANCE SHEETS FOR THE EXCHANGE FUND AND A TYPICAL CENTRAL BANK

PART 1: "THE ACCOUNT" OF HSBC AT THE EXCHANGE FUND

Before July 18, 1988 the essential features of the Exchange Fund were:

Exchange Fund

Assets	Liabilities
Foreign Exchange Reserves (FA)	Certificates of Indebtedness (= HK\$ Banknotes)
HK\$ Deposits at HSBC (DC)	

After July 18, 1988 the essential features are:

Exchange Fund

Assets	Liabilities
Foreign Exchange Reserves (FA)	Certificates of Indebtedness (= HK\$ Banknotes)
HK\$ Deposits at HSBC (DC)	The Account

A proto-typical central bank's balance sheet consists of:-

Central Bank

Assets	Liabilities
Foreign Assets (FA)	Currency Outstanding
Domestic Credit (DC)	Reserves and/or clearing balances of banks

FA = Foreign Assets

DC = Domestic Credit

In a typical central bank,
Currency + Reserves = Monetary Base

In Hong Kong, after July 18, 1988:

Certificates of Indebtedness + The Account = Monetary Base (B)
and, in this simplified model,

$$FA + DC = B$$

If the Exchange Fund or Central Bank acquires DC while the monetary base B remains unchanged, FA must fall.

SIMPLIFIED BALANCE SHEETS FOR THE EXCHANGE FUND AND A TYPICAL CENTRAL BANK

PART 2: THE TREASURY'S ACCOUNT AT THE EXCHANGE FUND

Before July 18, 1988 the essential features of the Exchange Fund including its obligations to the Treasury were:

Exchange Fund

Assets	Liabilities
Foreign Exchange Reserves (FA)	Certificates of Indebtedness (= HK\$ Banknotes)
HK\$ Deposits at HSBC (DC)	Debt Certificates

Debt Certificates are receipts issued by the Exchange Fund to the Treasury against funds held and managed on behalf of the Treasury.

After July 18, 1988 the essential features, including the new Treasury Account at the Exchange Fund, are:

Exchange Fund

Assets	Liabilities
Foreign Exchange Reserves (FA)	Certificates of Indebtedness (= HK\$ Banknotes)
HK\$ Deposits at HSBC (DC)	The Account
	Treasury Account
	Debt Certificates

A proto-typical central bank's balance sheet, including the deposits of government at the central bank, consists of:

Central Bank

Assets	Liabilities
Foreign Assets (FA)	Currency Outstanding
Domestic Credit (DC)	Reserves and/or clearing balances of banks
	Treasury Account

FA = Foreign Assets

DC = Domestic Credit

For Hong Kong, after July 18, 1988:

Certificates of Indebtedness + The Account = Monetary Base (B)

and $B = FA + (DC - \text{Treasury Account} - \text{Debt Certificates}) - \text{Net Worth}$

If the Exchange Fund wishes to tighten the money market via the Treasury Account it must reduce the monetary base. To do this it will transfer Treasury funds from the licensed banks to the Treasury Account at the Exchange Fund, debiting The Account of HSBC and crediting Treasury Account. To ease the money market it will conduct the reverse operation.

HK\$ banknotes (and therefore CIs) are issued in response to demand from the banks who in turn are responding to demand from their customers. This part of the Exchange Fund's balance sheet is essentially no different from the note issue component of a central bank's balance sheet.

2. "The Account" of HSBC at the Exchange Fund. This corresponds closely to the reserve or settlement accounts of commercial banks at a central bank. Whereas in central banking systems all commercial banks typically maintain an account at the central bank, in the Hong Kong system only the HSBC maintains an account at the Exchange Fund. However, since the Exchange Fund uses HSBC as an agent for settling its transactions with other banks there are no differences in practice between the impact of operations of conventional central banks on the reserve or settlement accounts of commercial banks. The critical question is how active the Exchange Fund is going to be in manipulating The Account.
3. The Treasury's account at the Exchange Fund. This is precisely comparable with the accounts which many central governments maintain with their central banks. Moreover, just as in other central banking systems Governments maintain deposit balances both with the commercial banks and with the central bank, so under Hong Kong's new arrangements the Treasury will maintain accounts both at the licensed banks and with the Exchange Fund.
4. Debt certificates. Since the late 1970's, the Exchange Fund has managed the majority of the fiscal balances of the Hong Kong Government (i.e. the cumulative fiscal surpluses) and these are represented on the liability side of the balance sheet of the Exchange Fund by Debt Certificates denominated in HK\$ and issued to the Treasury, and on the asset side by a mixture of HK\$ and foreign currency assets. This part of the Exchange Fund's balance sheet is best viewed as part of the fiscal accounts of the Government and not part of the monetary accounts of the Exchange Fund.

The Exchange Fund's assets differ in composition from those of central banks, but there are no substantive differences from an analytical point of view.

1. Foreign Assets (including gold). The Exchange Fund is said to hold a diversified portfolio of assets in foreign currencies and it may even hold some gold. The foreign currency assets, like the foreign assets of central banks elsewhere, probably consist of foreign currency deposits and short, medium and long term government paper such as Treasury bills and bonds. There is absolutely no difference between the position of the Exchange Fund and the position of other central banks with respect to their holdings of gold and foreign exchange except the legal provision in the Exchange Fund Ordinance which effectively requires the Exchange Fund to maintain assets equal to 105% of the sum total of Certificates of Indebtedness outstanding plus the aggregate of borrowings of the Exchange Fund.

2. Domestic Credit. In most countries central bank holdings of domestic credit consist of government securities, and private sector credit instruments such as commercial bills and loans to banks. In the case of the Exchange Fund, domestic credit consists almost entirely of loans to (or deposits with) the banking system because (a) there is only one issue of government debt outstanding (HK\$1 billion, of 10% coupon debt issued in 1984 and maturing in 1994), which is held largely by banks, and (b) there is only a limited market in commercial paper in Hong Kong. The composition of Exchange Fund holdings of domestic credit differs, therefore, from the composition of domestic credit held by central banks, but its monetary impact would be no different than it would be if it consisted of government debt and commercial paper.

Intervention by the Exchange Fund Under the Old and New Structure

Until the new changes announced on July 15th, the Exchange Fund was a client of the banking system in Hong Kong, holding Hong Kong dollar deposits at HSBC and other banks in Hong Kong, just like any individual or corporation in the territory. Accordingly, under the old structure when the Exchange Fund intervened in the foreign exchange market to buy or sell Hong Kong dollars, it settled these transactions by debiting or crediting its Hong Kong dollar deposit account at HSBC, and conversely the account of another bank or individual or company would have been correspondingly credited or debited in Hong Kong dollars. In other words when the Exchange Fund intervened, deposits in Hong Kong dollars were transferred from its account to the account of another individual or company in Hong Kong; there was no change in the aggregate size of the deposit liabilities of the banking system. Technically, Exchange Fund intervention was conducted in low powered money as opposed to high powered money, so that there was no multiple expansion or multiple contraction resulting from the Exchange Fund's intervention as there would have been in the case of a normal (unsterilised) central bank intervention. (See AMM July-August 1981, pp. 28-29.)

Therefore, when the Exchange Fund intervened in the money market in Hong Kong its effectiveness under the old regime was strictly limited. Similarly, when the Exchange Fund borrowed Hong Kong dollars in order to raise interest rates, these Hong Kong dollars were redeposited in the banking system by the Exchange Fund and there was no change in the overall level of interest rates. It was basically this ineffectiveness in the Exchange Fund's intervention operations that led the Government to introduce the July package of measures designed to make its intervention more effective in the future.

Under the new structure when the Exchange Fund intervenes in the foreign exchange market to buy Hong Kong dollars, which it would tend to do when the Hong Kong dollar was weakening against the official parity (i.e. moving towards 7.85 or 7.90), it will in future sell US dollars from its portfolio and buy Hong Kong dollars from one of the banks. Instead of paying Hong Kong dollars out of its deposit account with the Hongkong and Shanghai Bank as in the past, it will in future debit The Account of the HSBC at the Exchange Fund if it bought the Hong Kong dollars from the HSBC, or debit The Account with instructions to HSBC to debit the account of some other bank from which the Exchange Fund bought the Hong Kong dollars. This set of transactions produces a very different

result compared to the old-style intervention. The result is a contraction in the level of funds available to the inter-bank market, and to the extent that banks regard these funds as reserves, there will be a multiple contraction throughout the Hong Kong banking system. This will tend to push interest rates upwards, thus helping the exchange rate to appreciate back towards the official parity of 7.8.

Conversely, when the Hong Kong dollar is trading at a premium to its parity, e.g. when there is speculation that there might be a revaluation of the Hong Kong dollar and the free market rate is 7.75 or above, the Exchange Fund can now intervene by selling Hong Kong dollars and buying US dollars. Again it will settle this transaction by crediting The Account of the HSBC at the Exchange Fund, which will increase the funds available in the interbank market, and will have a multiple expansion effect throughout the banking system. This will tend to push interest rates downwards, thus helping the exchange rate to depreciate back towards the official parity of 7.8.

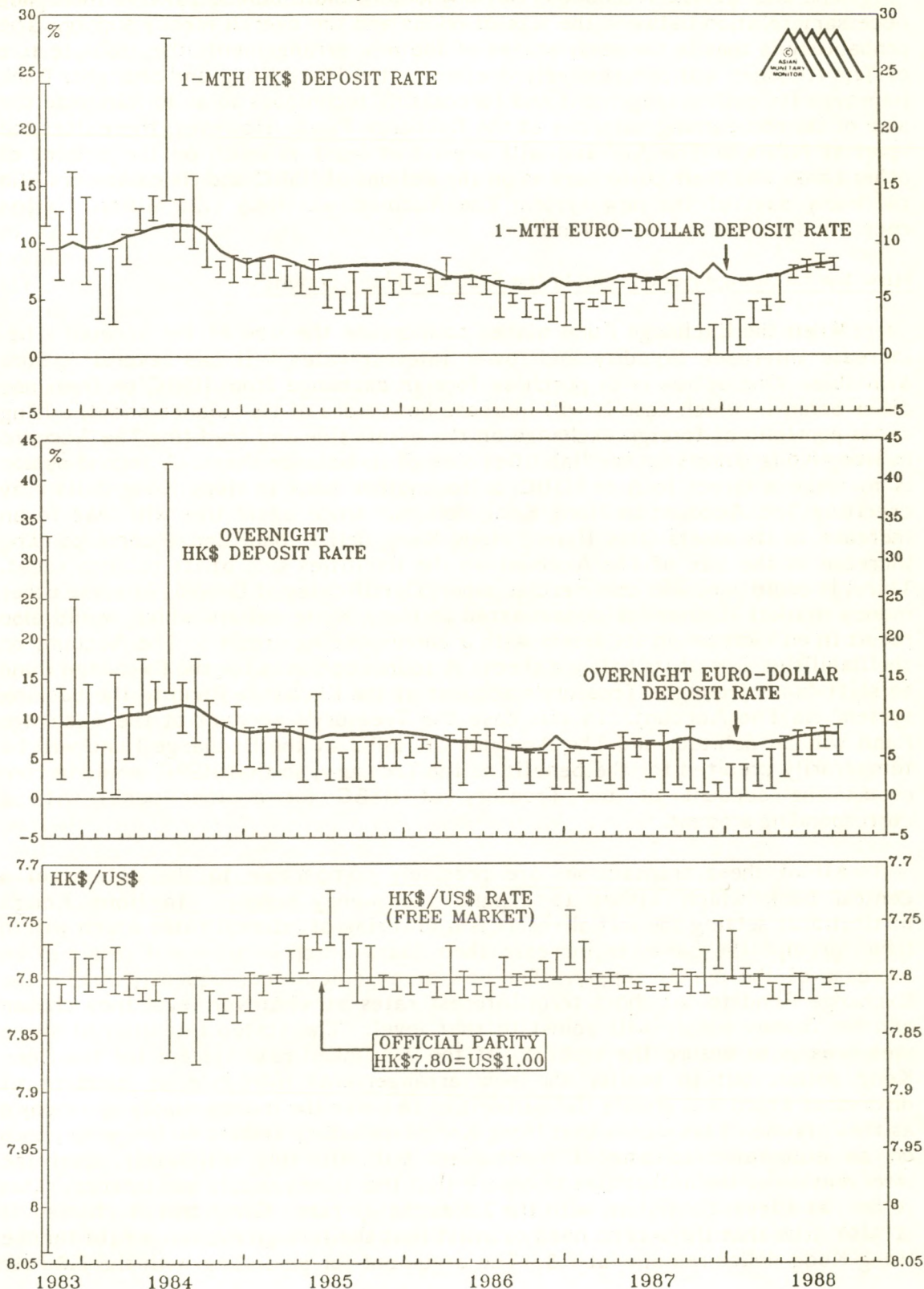
These transactions are quite different from the Exchange Fund's practice in the past of transferring Hong Kong dollar funds from the Exchange Fund account at HSBC to other parties (or vice-versa). The results of intervention under the July package will be to increase (or decrease) funds both in the inter-bank market and throughout the banking system and as a result interest rates will react more sharply than they have in the past whenever the Hong Kong dollar moved upwards or downwards relative to the official parity.

In summary, the new structure means that Exchange Fund intervention in the foreign exchange market and in the money market will be much more effective in keeping the free market rate for the Hong Kong dollar near to the official parity because its intervention operations will be transmitted more directly to the level of interest rates and hence to the quantity of money in the system as a whole. The problem under the previous regime was that it required a significant deviation of the free market exchange rate from the official parity in order to induce banks to conduct the arbitrage necessary to bring the free market rate back to the parity. Under the new arrangements the Exchange Fund will be able to intervene more rapidly and achieve a greater impact without having to wait for private sector arbitrage to do its work. In short, official intervention has taken the place of private sector arbitrage. There are real risks, however, associated with the new mechanism (see pp. 11-13 below).

How the HSBC Adjusts the Size of "The Account"

Under the new arrangements, HSBC has undertaken to maintain its account at the Exchange Fund at a level equal to the net clearing balances of the rest of the banking system. This means that on any particular day HSBC can find itself with an excess balance at the Exchange Fund or a shortage of funds at the Exchange Fund. How will it respond in this situation? Let us take the case of HSBC having an excess of funds at The Account. In this case HSBC will wish to either increase the size of NCBs or decrease the size of The Account. There are two ways in which it can do this: either HSBC can buy foreign exchange from other banks which will result in a crediting of Hong Kong dollars to the net clearing balances of other banks, or HSBC can increase its lending activities relative to other banks, which will in time lead to HSBC having negative net

HONG KONG : CHART 1
 HK\$/US\$ EXCHANGE RATE AND INTEREST DIFFERENTIALS
 OCTOBER 1983-SEPTEMBER 1988 ; Monthly Ranges for HK\$ data ;
 Monthly Averages for US\$ data



clearings at the clearing house, which will increase the size of other banks' NCBs.

The size of The Account is not any determinate number, nor is there any necessary relation between the size of NCBs and the overall money supply. The probability is that in the early stages of the new arrangements the absolute size of The Account will progressively decline as the Hong Kong and Shanghai Bank improves its cash management and forecasting techniques so as to minimise the size of its non-earning balances at the Exchange Fund. However, thereafter the level of NCBs or The Account will depend at least as much on the actions of other banks and their customers as on the actions of HSBC and its customers. (In the early days of the new system The Account was HK\$ 1.25 billion. It has recently declined to HK\$ 880 million).

How the Exchange Fund Adjusts the Size of "The Account"

When the Exchange Fund wishes to increase the size of the account - i.e. increase interbank liquidity and lower interest rates - it has several options available. One option is to purchase foreign exchange from HSBC or from any other bank, in which case it will increase both sides of its balance sheet, adding to its portfolio of foreign exchange on the assets side and crediting The Account in Hong Kong dollars on the liabilities side of its balance sheet. A second option is to make a direct loan to HSBC or to another bank in Hong Kong dollars by crediting The Account in Hong Kong dollars. Once again this will lead to an increase in its assets (this time a Hong Kong dollar loan) and a corresponding increase in the size of The Account on the liabilities side of its balance sheet. Third, it could purchase commercial paper, Certificates of Deposit or some other money market instrument denominated in Hong Kong dollars which would also result in an increase in its assets with a corresponding credit to The Account on the liabilities side of its balance sheet. A fourth option is for the Exchange Fund to shift funds from the Treasury's account at the Exchange Fund to the banking system via The Account. In this case the Treasury's account at the Exchange Fund will be debited, and The Account of HSBC at the Exchange Fund will be temporarily credited for the benefit of the Treasury, so that HSBC would in turn credit the account of the Treasury at HSBC (or another bank) with a corresponding amount.

All of these transactions are precisely comparable to the actions of a central bank which wishes to expand the money supply. In Hong Kong's institutional setting the initial result is a lowering of interest rates which will in turn prompt the banks to increase their loans which in turn will result in an increase of the money supply. The new arrangements consequently enable the Exchange Fund to set short term interest rates at whatever level they choose and the money supply will adjust to that level. The stated intention of these measures is to ensure the stability of the 7.8 linked rate system for the Hong Kong dollar, but in reality the new arrangements introduce an element of discretion which will enable the authorities to move the money supply up or down as they choose. This means that Hong Kong's monetary system no longer depends on an automatic adjustment mechanism but will rely ultimately upon the intervention of the authorities to ensure that the money supply and interest rates remain at a level consistent with the 7.8 exchange rate. Given this mechanism it is also true that there is no need to insist that the foreign exchange rate for the Hong Kong dollar remains at 7.8. The argument for persisting with the 7.8 rate

indefinitely depended largely on the proposition that private sector interest arbitrage was the key to keeping the free market rate close to the official parity. Since this is no longer the case it can no longer be argued that the 7.8 rate cannot be changed. Now that the Government has the means to enforce any rate that it chooses, the basis for sticking with 7.8 has been eroded. In abandoning automaticity and introducing discretion the Government has undermined the practical necessity of holding the linked rate at 7.8.

Alternative Operating Procedures under the New Arrangements

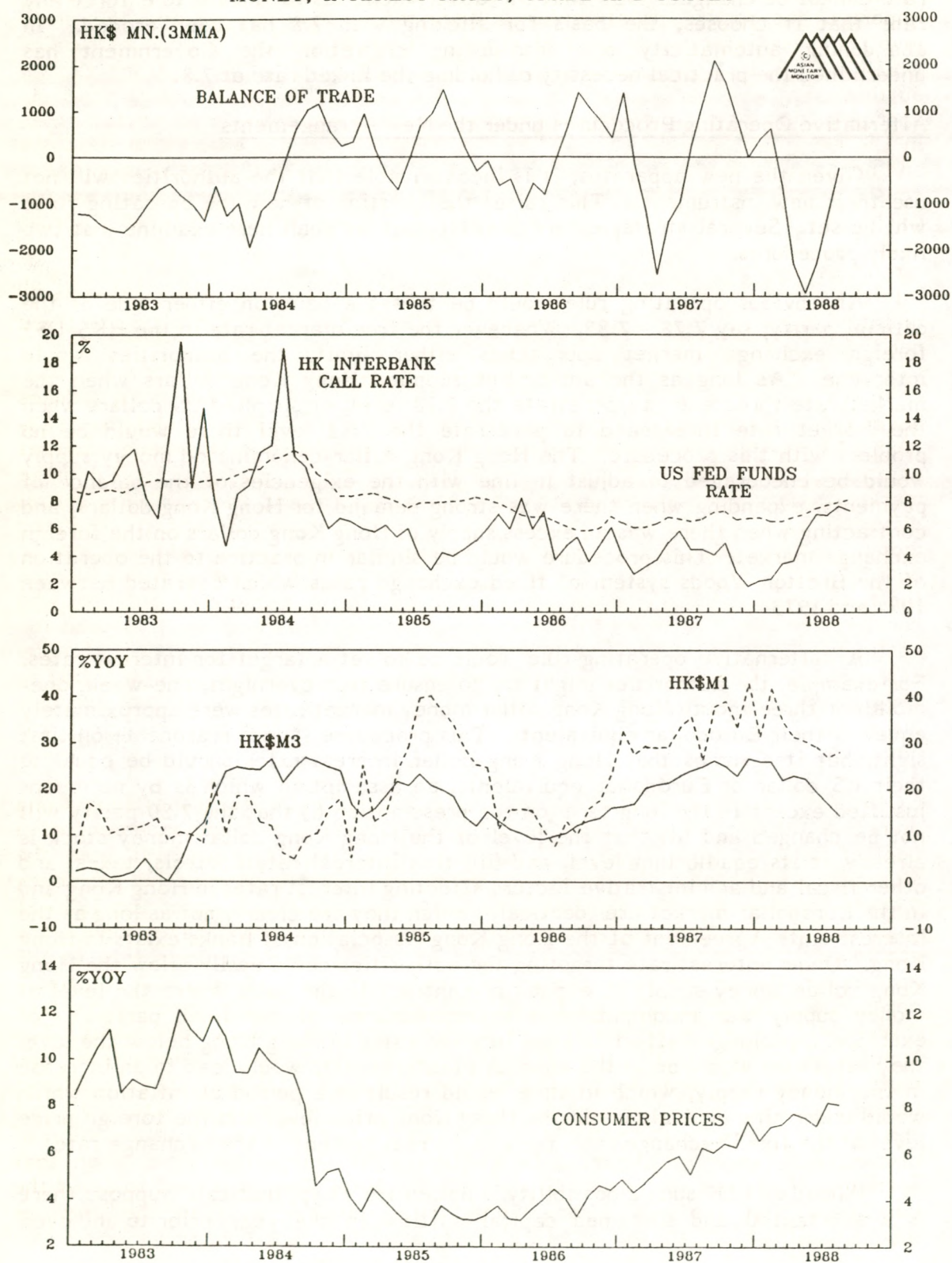
Given the new apparatus, it is inconceivable that the authorities will not use their new instruments. This raises the question of how the operating rules will be set. Several strategies are possible, but we shall here examine just two likely procedures.

An obvious operating rule would be to set a band on either side of the official parity, say 7.78 - 7.82. Whenever the free market rate in the HK\$-US\$ foreign exchange market approaches either limit, the authorities would intervene. As long as the authorities supplied Hong Kong dollars when the market rate threatened to penetrate the 7.78 level, or supplied US dollars when the market rate threatened to penetrate the 7.82 level there would be no problem with this procedure. The Hong Kong dollar-denominated money supply would be encouraged to adjust in line with the exigencies of the balance of payments, expanding when there was strong demand for Hong Kong dollars, and contracting when there was an excess supply of Hong Kong dollars on the foreign exchange market. This procedure would be similar in practice to the operation of the Bretton Woods system of fixed exchange rates which operated between 1944 and 1973.

An alternative operating rule would be to set a target for interest rates. For example, the authorities might try to ensure that overnight, one-week, one-month or three-month Hong Kong dollar money market rates were approximately equal to their Eurodollar equivalents. This procedure sounds reasonable on first sight, but it assumes that Hong Kong dollar interest rates should be equal to their US dollar or Eurodollar equivalents, an assumption which is by no means justified except in the long term on the presumption (i) that the 7.80 parity will not be changed and (ii) that the level of the Hong Kong dollar money stock is already at its equilibrium level, and (iii) that interest rate controls, taxes, and other fiscal and administrative factors affecting interest rates in Hong Kong and in the Eurodollar market are identical - which they are clearly not as long as the Interest Rate Agreement of the Hong Kong Association of Banks exists in Hong Kong. Under interest rate targeting the authorities could easily allow the Hong Kong dollar money supply to expand or contract to the point where the level of money supply was incompatible with maintenance of the fixed parity. For example, a prolonged effort to keep interest rates in Hong Kong below the level they otherwise would be in the absence of intervention would lead to an increase in the money supply, which in time would result in a period of inflation which would undermine equivalence in the Hong Kong price level and the foreign price level at the fixed exchange rate, requiring a realignment of the exchange rate.

Ahead of 1997 such a possibility is not entirely hypothetical. Suppose there is a substantial and sustained capital outflow in the years prior to and even

HONG KONG: CHART 2 MONEY, INTEREST RATES, TRADE AND PRICES



subsequent to the transfer of sovereignty of Hong Kong from Britain to China. What would be the effect on interest rates? The initial effect of a sudden outflow is to raise interest rates in Hong Kong sharply. In time the higher level of interest rates will slow monetary growth, slow nominal spending (including imports), and reduce inflation (or actually bring down wages and the price level). These effects will help to generate a trade or current account surplus which will finance the capital outflow. The longer term effect of the capital outflow on money market interest rates is not clear. They could return to levels approximately equal to US dollar rates, or they could return to levels below rates in US dollar markets if investment expectations about the future are seriously and negatively affected so that the demand for loans remains very weak. These considerations are sufficient to show that a policy of intervention by the Exchange Fund to maintain any particular relative or absolute level of interest rates could have very different effects, dependent upon the prevailing circumstances. In general terms, then, intervention by the authorities to peg interest rates would be risky and potentially destabilising, while intervention to maintain the free market exchange rate within a narrow band around the fixed parity will have less serious consequences.

However, even intervention to hold the exchange rate has consequences beyond that envisaged in the design of the linked rate system. Under the 1983-1988 regime there was no obligation on the authorities to intervene, so that capital outflows or inflows had to be matched in the (private) foreign exchange market until private sector arbitrage occurred sufficient to offset the initial disturbance. Under the new arrangements from July 1988 the danger is that the monetary authorities will immediately become the counter-party to the inflow or outflow, with the result that the foreign reserves of the Exchange Fund become the first line of defence. In the event of a prolonged and persistent outflow, who can be sure that the authorities will have sufficient reserves to withstand the outflow while at the same time maintaining the foreign exchange backing for the currency? Add to this the possibility that the authorities may also be trying to keep interest rates at some predetermined levels, and it is clear that the new discretionary tools open the system to potentially serious threats which it was not subject to as long as the authorities remained passive.

CONCLUSION: The new arrangements introduced in July by the Hong Kong monetary authorities constitute a major step towards the establishment of a central bank in Hong Kong. In particular the new arrangements give the Monetary Affairs Branch a degree of discretion in the determination of money market trends which it was never intended they should have under the 1983-88 regime. Alternative solutions were possible which would have solved the problems of the linked rate system without giving so much discretion to the authorities. We do not doubt that, used only to a limited degree and in relatively normal circumstances, the new tools will be highly effective in keeping the free market exchange rate for the Hong Kong dollar close to the official parity. The concern arises from the danger that the new instruments will be used more and more frequently and in circumstances where the inflows or (especially) outflows are so significant as to require large-scale intervention which will ultimately put the territory's reserves at risk. Any shift from a system of rules to a system of discretionary intervention must be regarded with circumspection; when that system could be put to the test by very large capital flows it is hard to avoid the conclusion that the new arrangements entail more risks than the previous mechanism.

APPENDIX: PRESS RELEASE FROM SECRETARY FOR MONETARY AFFAIRS, 15 JULY 1988

金融事務司

香港夏慤道十八號

海富中心第二座二十四樓



SECRETARY FOR
MONETARY AFFAIRS OFFICE
24TH FLOOR,
ADMIRALTY CENTRE TOWER II,
18 HARCOURT ROAD,
HONG KONG.

電話 TEL.: 5-290015

15 July 1988

本署檔號 OUR REF.:

From: Secretary for Monetary Affairs

來函檔號 YOUR REF.:

To : Chief Executives of all Licensed Banks

Chairman of the Hong Kong Association of Banks

Members of the Exchange Fund Advisory Committee, the Banking Advisory Committee and the Deposit-taking Companies Advisory Committee

Chairman of the Deposit-taking Companies Association

New Accounting Arrangements between
the Exchange Fund and the Hongkong and
Shanghai Banking Corporation

Introduction

This paper describes new accounting arrangements to be entered into on Monday 18 July 1988, with the approval of the Governor in Council and the agreement of the Hongkong and Shanghai Banking Corporation (HSBC), between the Exchange Fund and HSBC as the Management Bank of the Clearing House of the Hong Kong Association of Banks (HKAB). Members of the Exchange Fund Advisory Committee have been consulted and have unanimously supported the introduction of these new arrangements. The paper also explains how the new accounting arrangements are to be operated.

2. The purpose of the new accounting arrangements is to enable the Government, through the use of the Exchange Fund, to exercise more effective influence over the availability and price of money in the interbank market and thus to assist it better to maintain exchange rate stability within the framework of the linked exchange rate system. Under the present arrangements, there can be perverse side-effects which reduce the effectiveness of action by Government and HSBC to influence interest rates and the level of liquidity in the interbank market for the purpose of ensuring exchange rate stability.

The Interbank Market

3. Each licensed bank in Hong Kong maintains an

account, either with HSBC, the Management Bank of the Clearing House of HKAB, or with a Settlement Bank (as defined in Rules relating to the Clearing House of HKAB) which in turn maintains an account with HSBC, for the purpose of clearing Hong Kong dollar cheques and for settling interbank transactions denominated in Hong Kong dollars. Banks with surplus Hong Kong dollar balances on their clearing accounts lend those funds, through the interbank market, to banks which are short of funds. Deposit-taking companies and large corporate customers also make use of the interbank market, but settlement is effected through their accounts with licensed banks. Interbank interest rates are determined by the forces of supply and demand for funds in that market.

4. At present, HSBC, as the Management Bank of the Clearing House, does not itself have a clearing account. Settlement of Hong Kong dollar transactions between HSBC and other banks are effected through HSBC crediting or debiting, as the case may be, the clearing accounts maintained by these banks or by their Settlement Banks with HSBC. The Exchange Fund is a customer of HSBC and of a number of other banks. These existing arrangements have certain consequences on how the supply of money in the interbank market is determined and how interbank interest rates behave. Specifically, the supply of Hong Kong dollars in the interbank market increases and interbank interest rates ease when:

- (a) HSBC buys foreign currency or other assets from another bank, or from customers banking with another bank, with Hong Kong dollars; or
- (b) HSBC lends Hong Kong dollars in the interbank market; or
- (c) a customer of HSBC pays Hong Kong dollars from his account with, or credit facility made available by, HSBC to another person banking with another bank.

Similarly, the supply of Hong Kong dollars in the interbank market decreases and interbank interest rates firm when:

- (a) HSBC sells foreign currency or other assets to another bank, or to customers banking with another bank, for Hong Kong dollars; or
- (b) HSBC borrows Hong Kong dollars in the interbank market; or

- (c) a customer of HSBC accepts Hong Kong dollars for his account with, or for reducing a credit facility made available by, HSBC from another person banking with another bank.

5. Thus when the Exchange Fund, as a customer of HSBC, carries out foreign exchange and money market operations to stabilize the exchange rate, the effectiveness of such action can stand to be gradually eroded.

6. To illustrate, consider the case when, for whatever reason, the exchange rate is weakening away from 7.80. Arbitrage between the fixed-rate market for Hong Kong dollar bank notes and the foreign exchange market, or the threat of it, will contribute to containing the deviation from 7.80. At the same time and working in the same direction, the correct monetary policy response must be to keep conditions in the interbank market tight and interbank interest rates high relative to those of the US dollar. This can be achieved by the Exchange Fund selling US dollars for Hong Kong dollars or borrowing Hong Kong dollars, both through HSBC. If, however, other customers of HSBC are at the same time switching out of Hong Kong dollars into US dollars and to the extent that HSBC covers the short US dollar position by recouping the corresponding amount from the foreign exchange market, the tightness in the interbank market will inadvertently be relieved. Other customers of HSBC may also be taking advantage of the high Hong Kong dollar interbank interest rates available by running down HKAB-type deposits with, or drawing down best lending rate (BLR) facilities made available by, HSBC and placing those funds with other banks in the form of deposits which attract interbank interest rates. This again will unhelpfully relieve tightness in the interbank market.

New Accounting Arrangements

7. Such erosion in the effectiveness of foreign exchange and money market operations carried out by the Exchange Fund for the purpose of maintaining exchange rate stability is clearly undesirable. The Government and HSBC have both recognised this for sometime. New accounting arrangements between the Exchange Fund and HSBC, which effectively eliminate this shortcoming, have therefore been developed. The details of the new accounting arrangements are as follows:

- (a) HSBC maintains a Hong Kong dollar account (the "Account") with the Exchange Fund;
- (b) HSBC aims to maintain a balance (the "Balance") in that account no less than the net clearing balance ("NCB") of the rest of the banking system;
- (c) no interest is paid on credit balances in the Account;
- (d) if the Balance falls short of the NCB, HSBC pays interest on the shortfall to the Exchange Fund;
- (e) if NCB is in debit, HSBC pays interest on the debit amount to the Exchange Fund;
- (f) up to a certain amount, the rate of interest payable by HSBC under (d) and (e) is BLR or Hong Kong interbank offered rate (HIBOR), whichever is higher. Beyond that amount, the interest rate payable is 3% over BLR or HIBOR, whichever is higher. In exceptional circumstances, an alternative rate may be determined by the Financial Secretary, after consultation with HSBC;
- (g) the Exchange Fund will use the Account, at its discretion, to effect settlement of its Hong Kong dollar transactions with HSBC;
- (h) the Exchange Fund will also use the Account, at its discretion, to effect settlement of its Hong Kong dollar transactions with other licensed banks;
- (i) in case of (h), the Exchange Fund will either credit or debit the Account and HSBC will correspondingly credit or debit the clearing accounts of banks dealing with the Exchange Fund.

8. Along with these new accounting arrangements between the Exchange Fund and HSBC, the Treasury will also maintain a Hong Kong dollar account with the Exchange Fund where money transferred from the General Revenue to the Exchange Fund in return for interest bearing Debt Certificates will be accounted for. This provides an additional mechanism for the Exchange Fund to influence the supply of money in the interbank market.

9. Thus under the new accounting arrangements, the supply of Hong Kong dollars in the interbank market will increase and interbank interest rates will ease when:

- (a) the Exchange Fund buys foreign currency with Hong Kong dollars; or
- (b) the Exchange Fund lends Hong Kong dollars in the interbank market; or
- (c) Debt Certificates are redeemed from the Treasury and the balance in the Treasury's account with the Exchange Fund is reduced.

Similarly, the supply of Hong Kong dollars in the interbank market will decrease and interbank interest rates will firm when:

- (a) the Exchange Fund sells foreign currency for Hong Kong dollars; or
- (b) the Exchange Fund borrows Hong Kong dollars in the interbank market; or
- (c) Debt Certificates are issued to the Treasury and the balance in the Treasury's account with the Exchange Fund is increased.

Practical effects of the new accounting arrangements

10. Under the new accounting arrangements, the Exchange Fund will in effect be the ultimate provider of liquidity to the interbank market. It will be capable of influencing much more effectively the availability and the price of money in the interbank market and in a much better position to maintain exchange rate stability within the framework of the linked exchange rate system.

11. The new accounting arrangements will have no effect on the day to day operation of licensed banks in Hong Kong, other than HSBC. Those which have had, or are likely to have, dealings with the Exchange Fund should, however, be aware that, in addition to the established practice for effecting Hong Kong dollar settlements with the Exchange Fund as a customer, the Exchange Fund may choose to effect settlement through requesting HSBC to credit or debit, as the case may be, their clearing accounts maintained at HSBC. The Exchange Fund will at the same time credit or debit the Account as appropriate.

12. Thus when the Exchange Fund sells US\$100 million to, say, the Standard Chartered Bank at 7.85, the Hong Kong dollar settlement may be effected through:

- (a) the Exchange Fund debiting the Account HK\$785 million; and
- (b) HSBC debiting Standard Chartered's clearing account with HSBC HK\$785 million.

The monetary effects of this transaction will be that, other things being equal, both the Balance and NCB will be reduced by HK\$785 million. Interbank interest rates will as a result (and by design) be driven higher, thus giving support to the exchange rate.

13. Alternatively, in response to the exchange rate being at 7.85, Hong Kong dollars may be transferred from the General Revenue to the Exchange Fund, to the extent that there are surplus General Revenue balances in the banking system. Assuming that HK\$500 million is transferred from the General Revenue to the Exchange Fund and the Treasury meets that demand by withdrawing a HK\$300 million deposit from the Hang Seng Bank and HK\$200 million deposit from the Hang Lung Bank, the Hong Kong dollar settlements will be effected as follows:

- (a) the Exchange Fund credits Treasury's account with it by HK\$500 million and issues a Debt Certificate of that amount to the Treasury;
- (b) the Exchange Fund debits the Account HK\$500 million;
- (c) HSBC debits Hang Seng Bank's clearing account with itself HK\$300 million;
- (d) HSBC debits Hang Lung Bank's clearing account with itself HK\$200 million;
- (e) Hang Seng Bank debits the Treasury's deposit account with itself HK\$300 million; and
- (f) Hang Lung Bank debits the Treasury's deposit account with itself HK\$200 million.

The monetary effects of this transaction will be that, other things being equal, both the Balance and NCB will be reduced by HK\$500 million. Interbank interest rates will again be driven higher, giving support to the exchange rate.

14. The undertaking by HSBC to maintain a balance on the Account no less than the NCB of the rest of the banking system means that it will have in effect created for itself a clearing account. Thus, when HSBC purchases for its customers US dollars with Hong Kong dollars, NCB

will increase. So that this will not result in the Balance falling short of NCB, it will be in the interest of HSBC to fund the US dollar purchase by borrowing Hong Kong dollars in the interbank market, in a manner identical to that in which any other licensed bank would currently act. In doing so, the supply of Hong Kong dollars in the interbank market will not be affected.

Market information

15. Given the monetary effects of Exchange Fund operations under the new accounting arrangements, it will be useful to participants in the foreign exchange and money markets to have access to certain relevant information. Arrangements are being made for the Exchange Fund to publish at appropriate times on each day through the electronic media the Balance at the close of the previous day and the net effect of operations carried out by the Exchange Fund during the day on the Balance. It is hoped that such information will start to be made available in early September. When considered appropriate, other information will also be so published.

16. Any request for clarification of the matters described in this paper should be addressed to the Deputy Secretary for Monetary Affairs who is in charge of the operation of the Account. He can be reached at 5-290021.

JAPAN: THE IMPACT OF RISING INTEREST RATES AND FINANCIAL DEREGULATION ON THE EQUITY MARKET

Over recent years the buoyancy of the Japanese stockmarket priced at levels well in excess of the rest of the world has presented an enigma in an environment in which there is increasing freedom of capital mobility and globalisation of equity markets. At the end of June 1988, the price earnings multiple for the Japanese stockmarket stood at 57.5 compared to a weighted average of just 13.1 for the rest of the world. Many factors have been advanced to explain this divergence, most of which have concentrated on explaining why the conventionally quoted price earnings ratios are exaggerated. The lack of a hostile takeover culture and a high corporate tax rate, which together provide Japanese corporations with a reason to understate their profits, are two of the more popular explanations. Other explanations have stressed the relatively low proportion of the free float as a fraction of the total market capitalisation, owing to the large cross holdings of equity among companies. Still others have highlighted the importance of capital gains rather than future profit streams, owing to the differential tax treatment of capital gains and income. Measures such as price to book value are therefore held to provide a better guide to value.

However, none of these explanations entirely explains the divergence in valuations. In particular, while these views may go some way to explaining why the Japanese equity market has always traded on a higher earnings multiple, they do not adequately explain why the divergence has widened so much since 1982. The dominant cause of this increasing divergence between equity values in Japan and the rest of the world since 1982 has been the falling cost of capital. At the beginning of 1988 real interest rates in Japan, as measured by the benchmark long bond rate minus the consumer price inflation rate, stood at just 3%, compared to an average of over 5% in the other major industrialised nations. Thus, the earnings yield on the nominal TSE index expressed as a ratio of the bond yield stood at 0.45, little changed from 0.47 in 1982, despite the fact that the earnings yield on stocks had more than halved from 3.8% to 1.7%.

Unfortunately there is now mounting evidence that the Japanese interest rate cycle has turned, with negative implications for the equity market. After falling from a peak of 8.3% in August 1982 to below 3% in May 1987, the yield on the benchmark long bond has since risen to over 5%. Over the same period the call rate fell from 5.2% to 3.1%, before rising to 3.75%. This has left the earnings yield as a ratio of the bond yield at 0.33. A complicating factor in analysing the impact of this reversal in the interest rate cycle on the equity market is that it is coming at a time of great change in the Japanese financial system. The deregulation of the Japanese financial system is gathering momentum and the 8% Bank for International Settlements (BIS) capital adequacy requirement on banks by March 1992 is being gradually phased in. In combination with rising interest rates, these developments are set to alter significantly the investment behaviour of financial institutions.

The following article examines the background to the rising interest rate environment in conjunction with financial deregulation and the BIS capital

adequacy requirements, and the likely impact on the equity market.

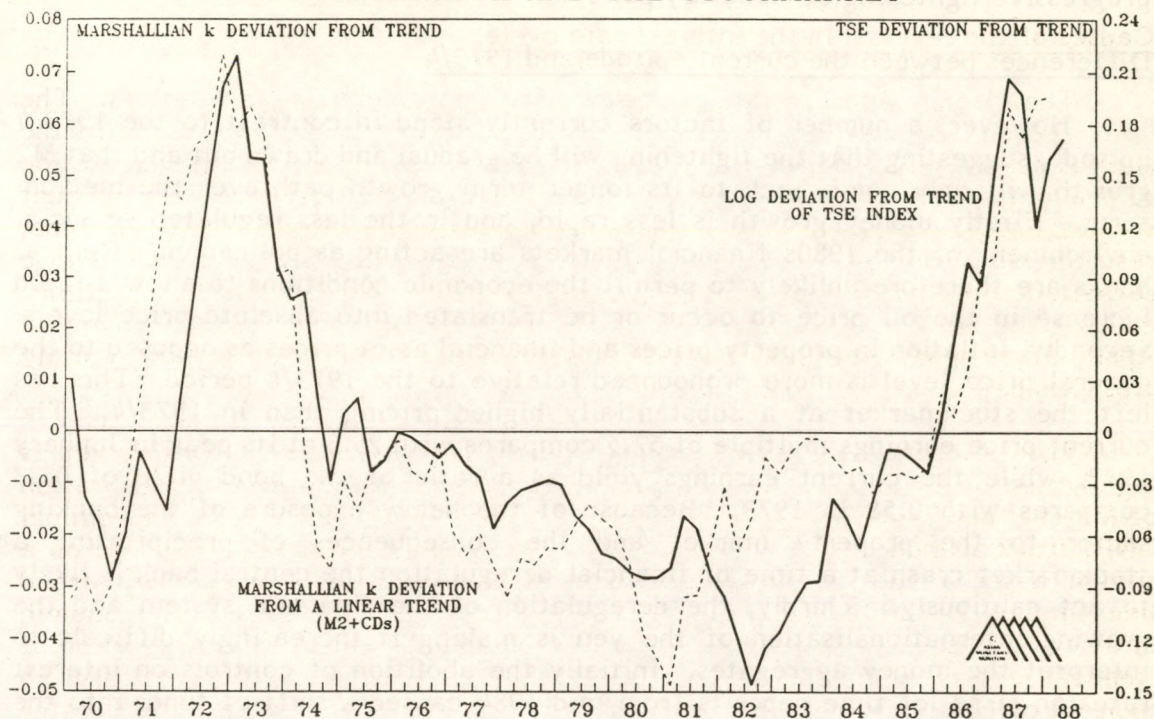
Causes of the reversal in the interest rate cycle

The rise in interest rates reflects both 'real' and 'nominal' factors. The 'real' reason for the turn in the interest rate cycle - the slow decline in the surplus of savings over investment - was discussed extensively in the last edition of AMM (see Vol. 12 No. 3). Since its peak in January the current account surplus has fallen from \$8,031 m (seasonally adjusted) to \$5,230 m in June, resulting in a rising cost of capital. More recently the rise in rates has also reflected the emergence of the first signs of rising inflationary expectations, causing the Bank of Japan to tighten slightly monetary conditions beginning in April. Since peaking in February at 12.4% the year-on-year rate of growth of M2 plus CDs had slowed to 11.1% by July.

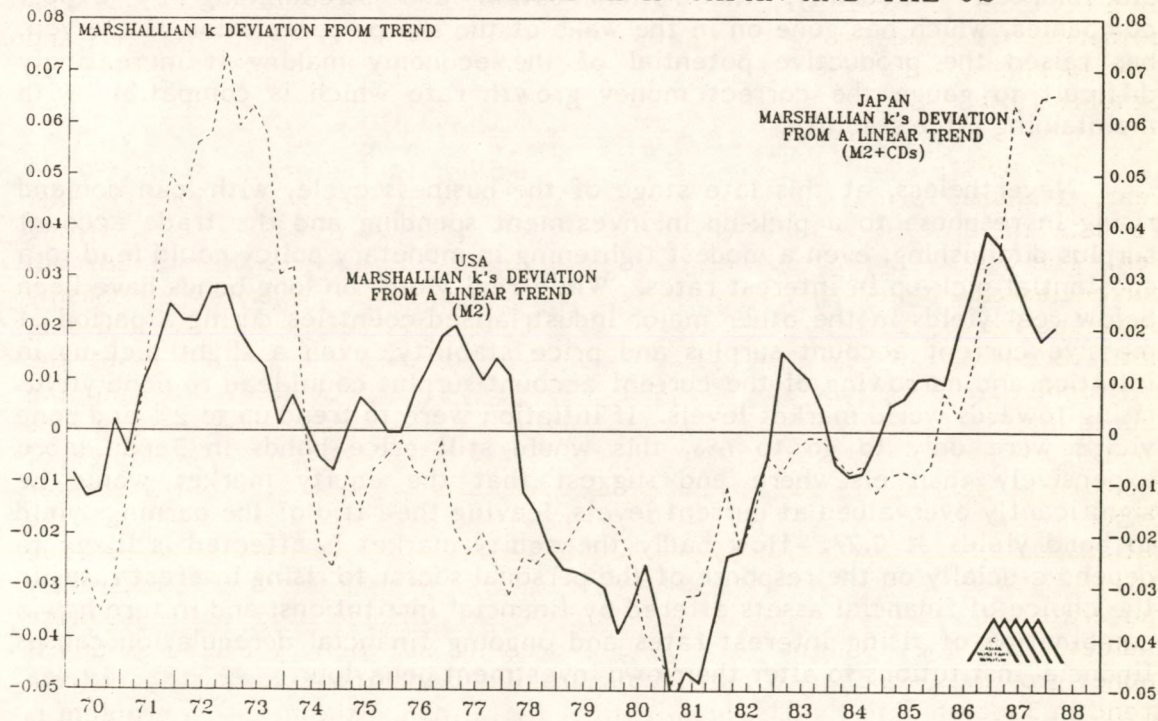
The potential impact of slower money growth on the stockmarket is highlighted by Chart 1. This shows the close relationship between the deviation of Marshallian k, defined as M2 plus Certificates of Deposit divided by nominal GNP, from a linear trend and the Tokyo Stock Exchange Index measured on a similar basis. A positive deviation of Marshallian k above the long-term trend line implies a surplus of liquidity to finance any given level of economic activity. Consequently this excess liquidity spills over into the accumulation of financial assets, which is reflected in a rising equity market. There is also an indirect effect via rising expectations about corporate profits growth. At a later stage inflation in real assets also results. The chart shows that there have been two periods when Marshallian k has deviated substantially above trend - from late 1970 to mid 1974 and again from mid 1986 until the present. The first period encompassed the massive hike in the oil price which was accommodated by a lax monetary policy and a rise in consumer price inflation to over 25%. The authorities responded by trimming monetary growth rapidly, inflation fell and the stockmarket dropped by 37.4% from its peak in January 1973 to its lows in October 1974.

The current episode has seen money growth rise to above 11% for over a year, compared with a rate that varied little from 8% between 1982 and 1986. To date the inflationary consequences of this have been masked by a strong yen. The currency has remained above the equilibrium level against almost all currencies as implied by both differential money growth rates and purchasing power parity exercises. The weak oil price, increased import penetration and, until recently, low levels of capacity utilisation have also helped. But the environment is now changing. Not only has the yen begun to weaken, but the labour markets are tightening with the job offers to applicants ratio rising 75% to 1.09, and capacity constraints are becoming evident in a wide range of industries. For a time the inflation rate may be contained through greater import penetration, the relaxation of import tariffs, as well as the rationalisation of the distribution system. These steps will alter the relative prices between traded and non-traded goods and for a time will apparently moderate the inflation rate, as measured by the consumer and wholesale price indices. But they will not alter the underlying inflationary pressures unless money growth is reined in. Chart 2 compares the deviation in Marshallian k from trend in Japan and in the US, highlighting that although the inflation problem is currently more pronounced in the US, in future it seems as though Japan faces

JAPAN: CHART 1 MARSHALLIAN k AND THE STOCKMARKET



JAPAN: CHART 2 TRENDS IN MARSHALLIAN k IN JAPAN AND THE US



the bigger problem. The central bank is therefore likely to engineer a progressive tightening of monetary policy.

Differences between the current episode and 1973/4

However, a number of factors currently stand in contrast to the 1973/4 episode, suggesting that the tightening will be gradual and drawn out and that M2 growth will only come back to its longer term growth path over the medium term. Firstly money growth is less rapid, and in the less regulated financial environment of the 1980s financial markets are acting as policemen. Central banks are therefore unlikely to permit the economic conditions to allow a rapid increase in the oil price to occur or be translated into absolute price levels. Secondly, inflation in property prices and financial asset prices as opposed to the general price level is more pronounced relative to the 1973/4 period. This has left the stockmarket at a substantially higher pricing than in 1973/4. The current price earnings multiple of 57.5 compares with 25.3 at its peak in January 1973, while the current earnings yield as a ratio of the bond yield of 0.33 compares with 0.58 in 1973. Because of the heavy exposure of the banking sector to the property market and the consequences of precipitating a stockmarket crash at a time of financial deregulation the central bank is likely to act cautiously. Thirdly, the deregulation of the financial system and the growing internationalisation of the yen is making it increasingly difficult to interpret the money aggregates. Initially the abolition of controls on interest rates on large lot time deposits from mid 1984 caused a shift of funds into the deposit money banking system. Since April the reverse has been the case. The partial abolition of the Maruyu system, which exempted interest on small scale time deposits from tax, has caused a reverse flow of funds from the deposit money banks to the trust banks, life insurance companies and directly into the stockmarket. Fourthly, the rationalisation and streamlining by export companies, which has gone on in the wake of the sharp appreciation of the yen, has raised the productive potential of the economy making it increasingly difficult to gauge the correct money growth rate which is compatible with maintaining price stability.

Nevertheless, at this late stage of the business cycle, with loan demand rising in response to a pick-up in investment spending and the trade account surplus diminishing, even a modest tightening in monetary policy could lead to a substantial pick-up in interest rates. While real yields on long bonds have been below real yields in the other major industrialised countries during a period of massive current account surplus and price stability, even a slight pick-up in inflation and narrowing of the current account surplus could lead to bond yields rising towards world market levels. If inflation were to trend up to 2% and bond yields were only to go to 6%, this would still price bonds in Japan more expensively than elsewhere and suggest that the equity market would be significantly overvalued at current levels, leaving the ratio of the earnings yield to bond yields at 0.27. How badly the equity market is affected is likely to depend crucially on the response of the personal sector to rising interest rates in the choice of financial assets offered by financial institutions, and in turn how a combination of rising interest rates and ongoing financial deregulation causes financial institutions to alter their own investment behaviour.

The deployment of personal sector savings

Chart 3 shows the net financial deficits and surpluses of the personal, corporate, government and external sectors. It highlights the consistently large surpluses generated by the consumer sector, the steady improvement in the public sector deficit since 1979, as well as the slow improvement in the financial position of the corporate sector since 1982. These trends were associated with the growth of the current account surplus and the fall in the cost of capital. As the current business cycle continues consumer spending will likely run in excess of the growth of personal disposable incomes, and as capacity constraints continue to emerge and fixed investment spending gathers momentum, the financial position of the corporate sector will again deteriorate. The current account surplus will therefore fall, which, in conjunction with tighter money, will cause interest rates to rise.

In a falling interest rate environment between 1982 and mid-1987 the reaction of the personal sector was to deploy an increasing fraction of their financial surplus in insurance related products and to deposit a smaller portion with the banking sector (see Chart 4). The insurance companies enticed the personal sector largely by offering a minimum guaranteed rate of return, which they achieved by investing in high yielding US government bonds. In a rising interest rate environment there is likely to be a slow switch back towards the banking sector and away from direct investment in equities.

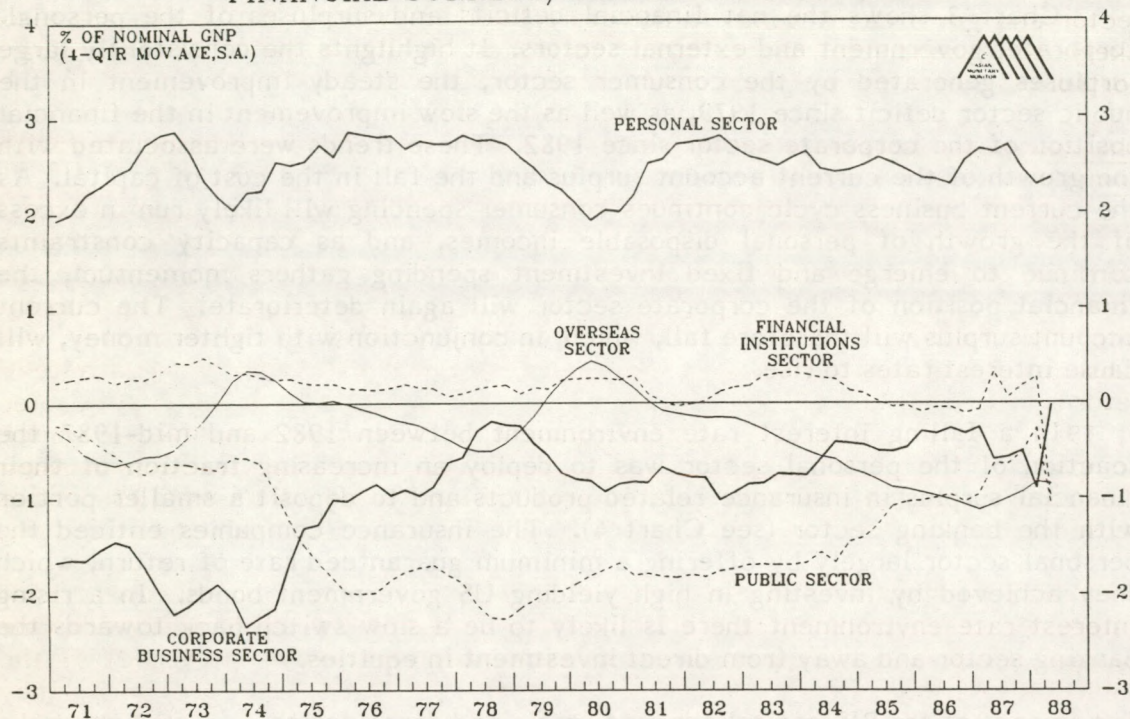
The impact of the BIS capital adequacy ratio and deregulation

However, there is no guarantee that the investment strategy of the banking sector will be the same as that of the insurance companies. The ongoing deregulation of the banking sector combined with the gradual implementation of the BIS capital adequacy requirements by March 1992 is likely to alter substantially the composition of the asset side of bank's balance sheets. Not only will the banking sector be forced to rationalise to boost profitability, as well as raising equity capital, but it will also have to concentrate on improving the quality of its loan portfolio and alter the composition between loans and other assets. Already, for example, securitisation of housing loans is occurring, allowing banks to take assets off their balance sheets.

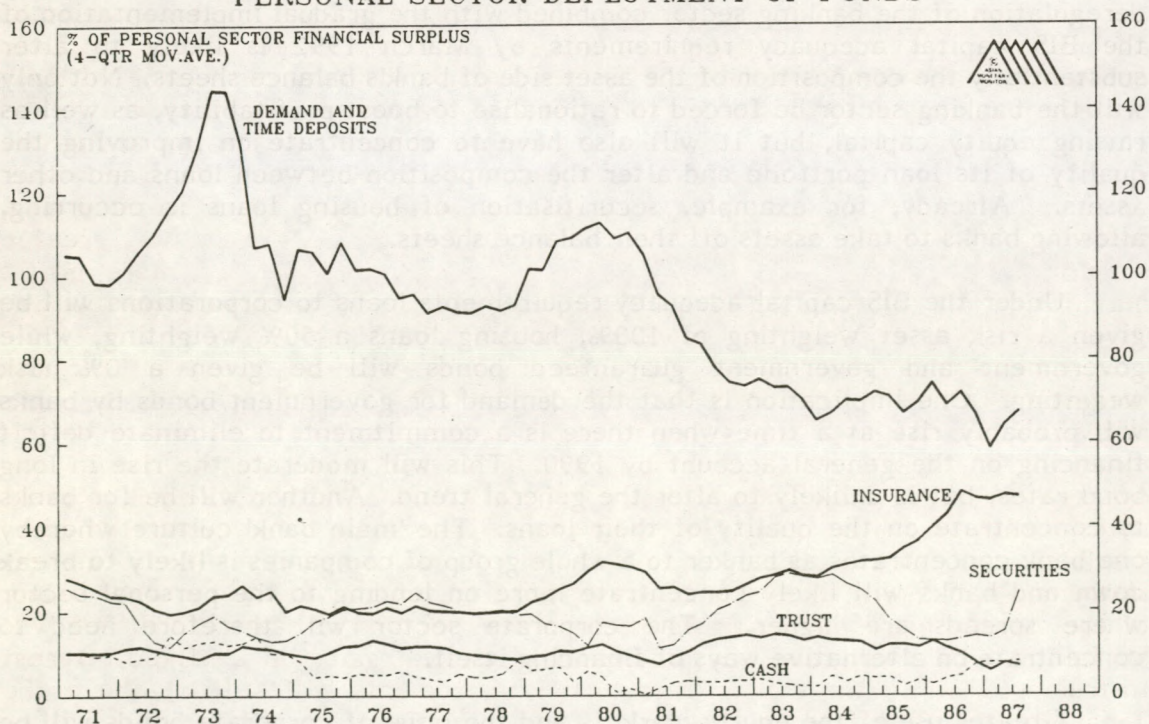
Under the BIS capital adequacy requirements loans to corporations will be given a risk asset weighting of 100%, housing loans a 50% weighting, while government and government guaranteed bonds will be given a 0% risk weighting. One implication is that the demand for government bonds by banks will probably rise at a time when there is a commitment to eliminate deficit financing on the general account by 1990. This will moderate the rise in long bond rates, but is unlikely to alter the general trend. Another will be for banks to concentrate on the quality of their loans. The 'main bank' culture whereby one bank concentrates as banker to a whole group of companies is likely to break down and banks will likely concentrate more on lending to the personal sector where spreads are higher. The corporate sector will therefore need to concentrate on alternative ways of financing itself.

Greater use of the equity markets and the issue of corporate bonds will be one solution. At a time when banks will be keen to expand fee business without a

JAPAN: CHART 3
FINANCIAL SURPLUS/DEFICIT AS % OF GNP



JAPAN: CHART 4
PERSONAL SECTOR DEPLOYMENT OF FUNDS



corresponding increase in their balance sheets the issue of alternative financing techniques is given increased likelihood. The spread between yields on corporate sector and government bonds is therefore likely to widen. But banks are also likely to expand their investment portfolios at the expense of their loan portfolios.

The contrast between the investment behaviour of banks and insurance companies

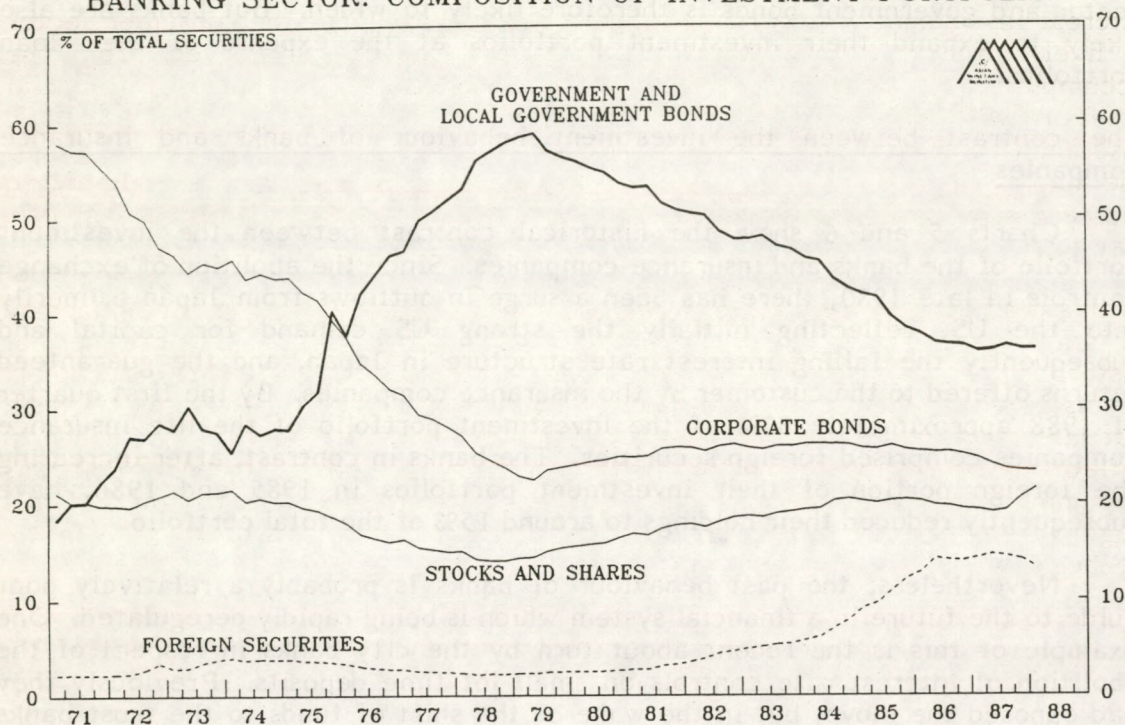
Charts 5 and 6 show the historical contrast between the investment portfolio of the banks and insurance companies. Since the abolition of exchange controls in late 1980, there has been a surge in outflows from Japan primarily into the US, reflecting initially the strong US demand for capital and subsequently the falling interest rate structure in Japan, and the guaranteed returns offered to the customer by the insurance companies. By the first quarter of 1988 approximately 30% of the investment portfolio of the life insurance companies comprised foreign securities. The banks in contrast, after increasing the foreign portion of their investment portfolios in 1985 and 1986, have subsequently reduced their holdings to around 15% of the total portfolio.

Nevertheless, the past behaviour of banks is probably a relatively poor guide to the future in a financial system which is being rapidly deregulated. One example of this is the recent about turn by the city banks in respect of the abolition of interest rate controls on small lot time deposits. Previously they had opposed the move, but in the wake of the shift of funds to the trust banks and life insurance companies in response to the abolition of Maruyu, they have begun to press for abolition.

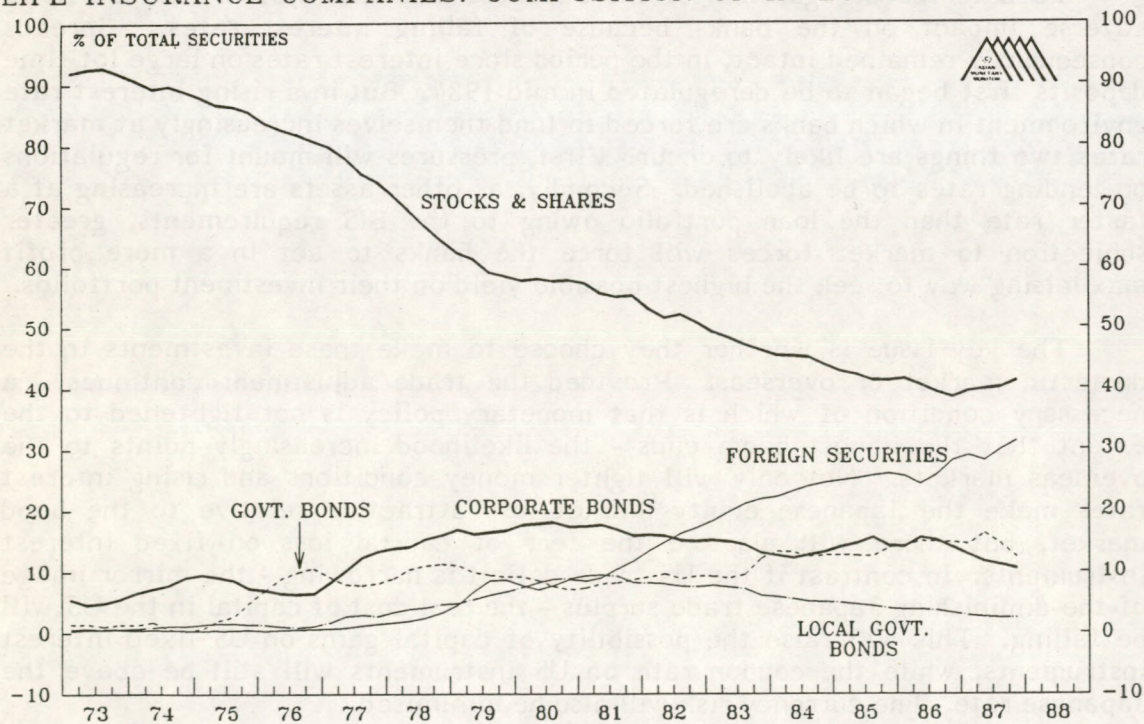
To date the deregulation of the Japanese financial system has had little adverse impact on the banks because of falling interest rates. Spreads consequently remained intact, in the period since interest rates on large lot time deposits first began to be deregulated in mid 1984. But in a rising interest rate environment in which banks are forced to fund themselves increasingly at market rates two things are likely to occur. First, pressures will mount for regulations on lending rates to be abolished. Secondly, as other assets are increasing at a faster rate than the loan portfolio owing to the BIS requirements, greater subjection to market forces will force the banks to act in a more profit maximising way to seek the highest possible yield on their investment portfolios.

The key issue is whether they choose to make these investments in the domestic market or overseas. Provided the trade adjustment continues - a necessary condition of which is that monetary policy is not tightened to the extent that the import boom ends - the likelihood increasingly points to the overseas markets. Not only will tighter money conditions and rising interest rates make the Japanese equity market less attractive relative to the bond market, but there will also be the fear of capital loss on fixed interest instruments. In contrast if the US trade deficit is narrowing - the mirror image of the diminishing Japanese trade surplus - the real cost of capital in the US will be falling. This will raise the possibility of capital gains on US fixed interest instruments, while the coupon rate on US instruments will still be above the Japanese rate. The currency risk will also be minimised.

JAPAN: CHART 5
BANKING SECTOR: COMPOSITION OF INVESTMENT PORTFOLIO



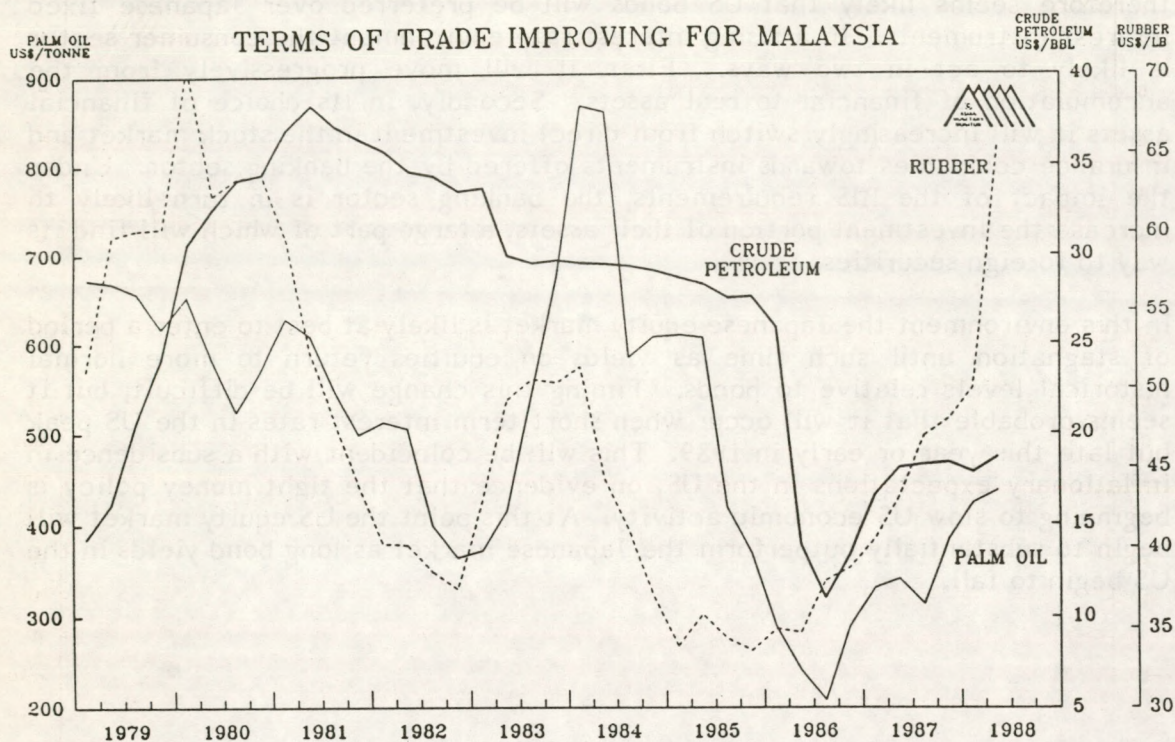
JAPAN: CHART 6
LIFE INSURANCE COMPANIES: COMPOSITION OF INVESTMENT PORTFOLIO



FORECAST: Until such time as the Japanese trade surplus is eliminated it therefore seems likely that US bonds will be preferred over Japanese fixed interest instruments. In a rising interest rate environment the consumer sector is likely to act in two ways. First, it will move progressively from the accumulation of financial to real assets. Secondly, in its choice of financial assets it will increasingly switch from direct investment in the stock market and insurance companies towards instruments offered by the banking sector. Under the impact of the BIS requirements, the banking sector is in turn likely to increase the investment portion of their assets, a large part of which will find its way to foreign securities.

In this environment the Japanese equity market is likely at best to enter a period of stagnation until such time as yields on equities return to more normal historical levels relative to bonds. Timing this change will be difficult, but it seems probable that it will occur when short term interest rates in the US peak out late this year or early in 1989. This will be coincident with a subsidence in inflationary expectations in the US, on evidence that the tight money policy is beginning to slow US economic activity. At this point the US equity market will begin to substantially outperform the Japanese market as long bond yields in the US begin to fall.

MALAYSIA: AS COMMODITY PRICES RISE, GROWTH ACCELERATES

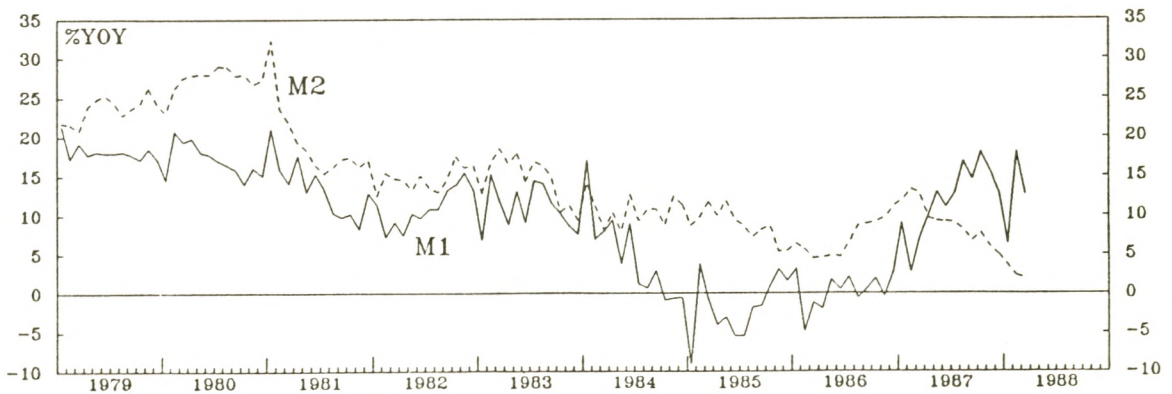
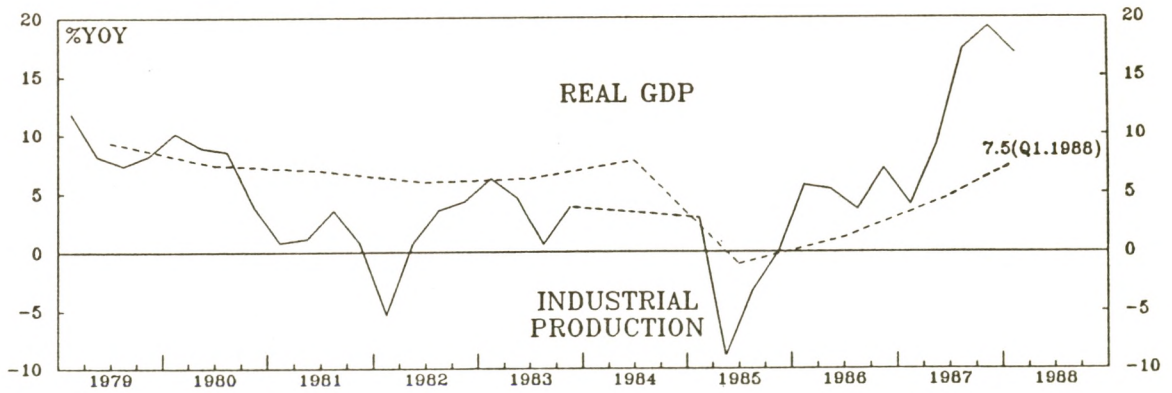
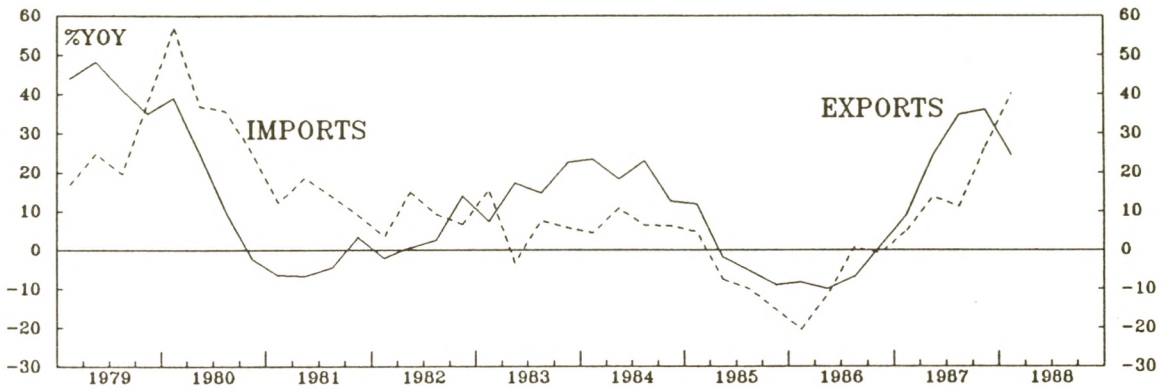
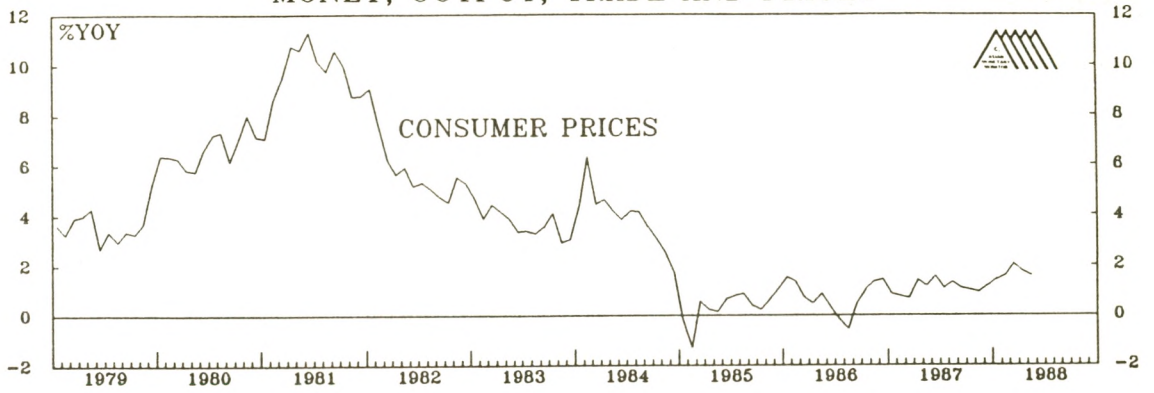


Following an unexpectedly strong 7.5% growth in real GNP during the first quarter of 1988, latest estimates suggest that Malaysia's real GNP could grow by over 7% this year on the back of a second year of rising commodity prices. Since the turn of the year the rubber price has risen by 28% to an 8 year high. Furthermore, in contrast to 1987 when the recovery was focused almost exclusively on exports and consumption expenditure, there are now growing signs that the recovery is filtering through to private sector fixed investment.

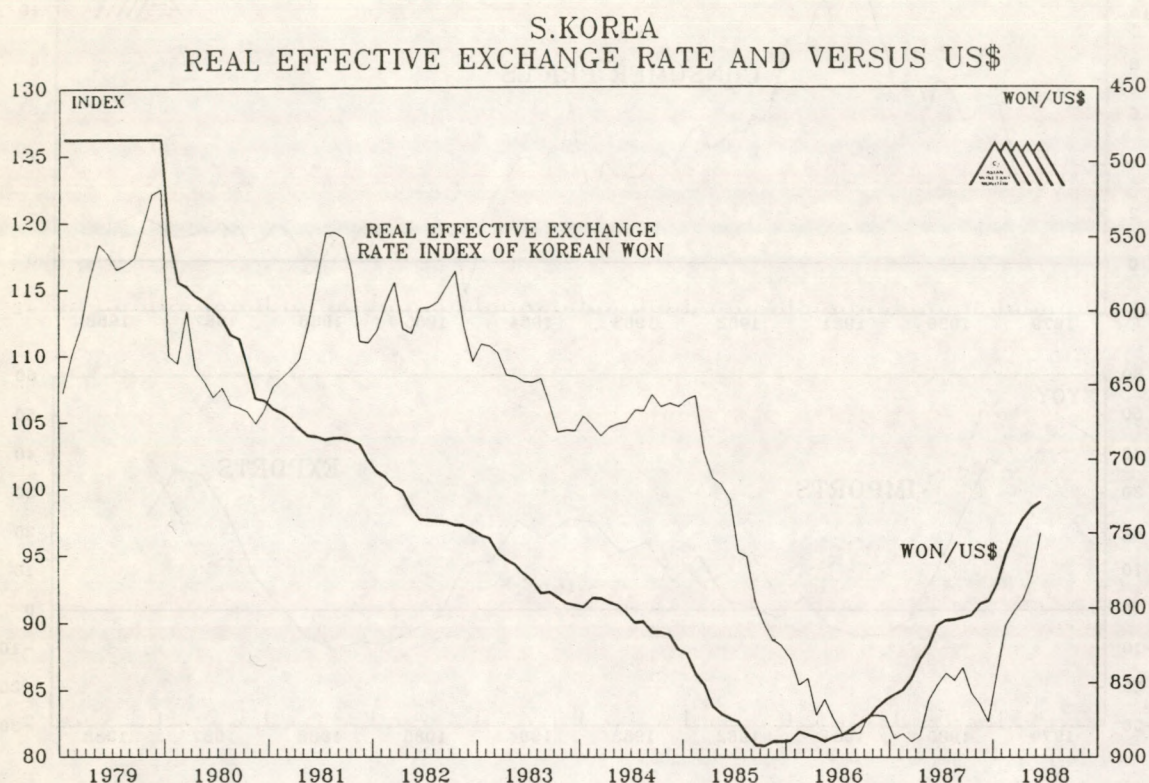
During 1987 and the early part of 1988 private investment was subdued by low levels of capacity utilisation, political uncertainties and a depressed property market. The recession in the property market also made banks particularly cautious in their lending activity. Currently more than 50% of the assets of the banking system are lent against property or are property related. This was reinforced by the increasingly large gap between lending and deposit rates, which meant that lending rates remained at nearly 10%. Banks were reluctant to lower their interest rate structure, keeping margins high, because of the priority lending they are forced to undertake. Consequently, while the overall balance of payments surplus caused liquidity in the money market to rise and money market interest rates to fall, money growth decelerated. By April, the latest month for which money supply figures are available, M1 was growing at an annual rate of 15.8% and M2 by just 2.8%.

However, there is evidence that money growth is now beginning to accelerate. With capacity utilisation and property prices climbing and export growth continuing to accelerate, loan demand is improving. This trend should accelerate during the second half of the year, as the recent surge in commodity prices is reflected in further gains in corporate profitability.

MALAYSIA MONEY, OUTPUT, TRADE AND PRICES



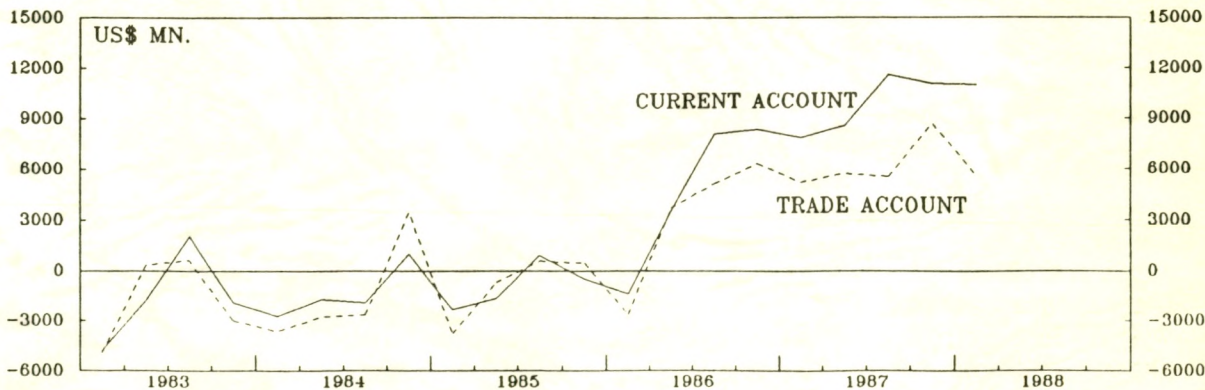
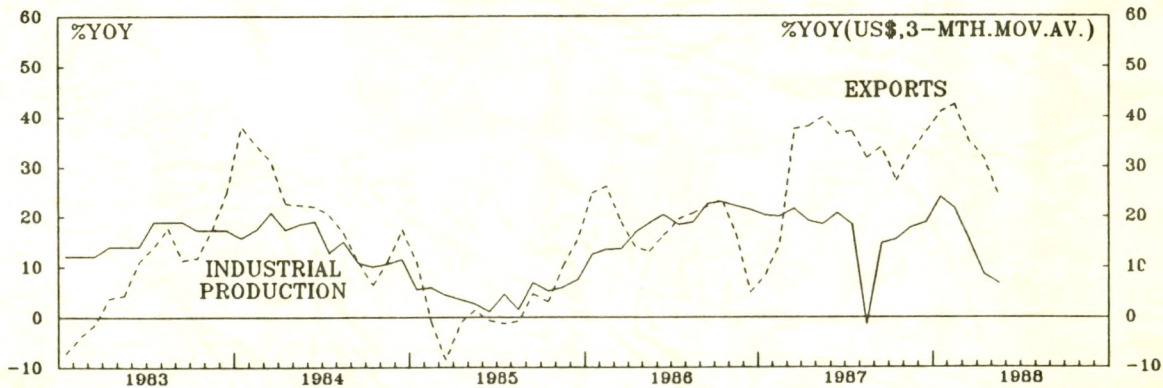
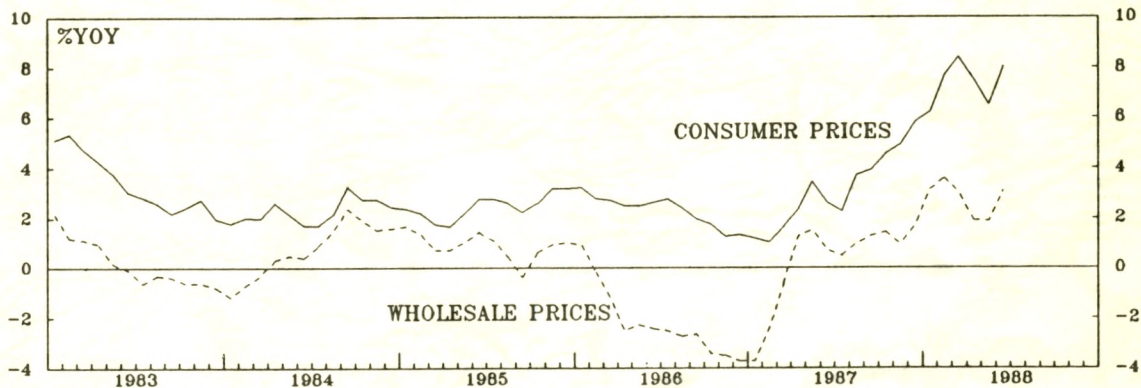
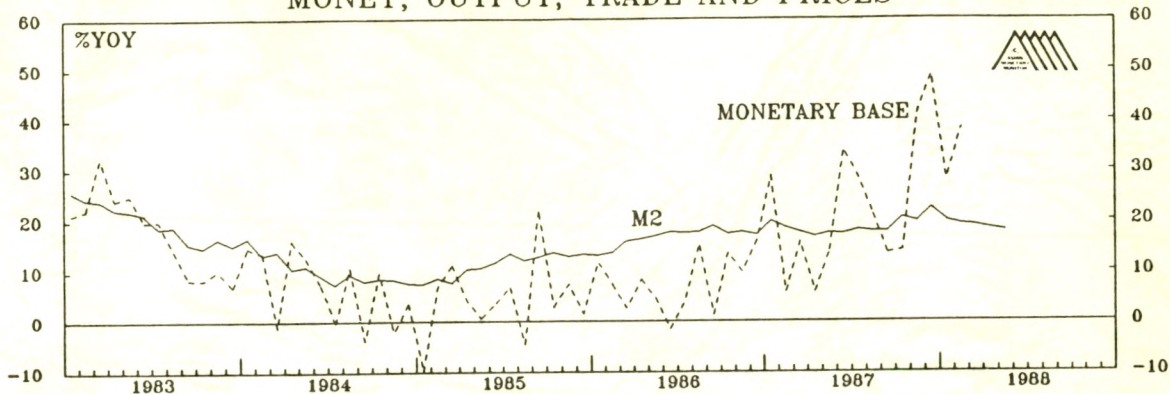
SOUTH KOREA: THE CENTRAL BANK STEPS UP THE PACE OF MONETARY STERILISATION



Although the rate of growth of S. Korea's money supply slowed through the first six months of 1988 it continued to remain above the 15% to 18% target range, confirming a trend that had been evident throughout 1987. Consequently, there is little chance that the government's original objective of containing the inflation rate below 5% this year will be met. In the year to June consumer prices and wholesale prices rose by 7.4% and 2.8% respectively, and both the Economic Planning Board and the Bank of Korea expect inflation to accelerate further in the second half of 1988. In response the Bank of Korea has in the space of two months twice raised the limit on the issuance of monetary stabilisation bonds, from 35% to 40% of M2 and then from 40% to 50%. The financial markets are consequently being flooded with the stabilisation bonds. The stabilisation bonds are allocated at a fixed coupon rate among financial institutions, rather than by tender, and the institutions effectively underwrite the issues before selling them into the secondary market. In the current environment this is resulting in them having to sell below par and incur a loss.

The drive against inflation also presents a negative environment from an investment perspective, at a time when export growth is already slowing. A period of slower corporate profits growth, tightening liquidity and rising interest rates therefore lies ahead. During the first five months of 1988 Korea's exports increased at a rate of 28.1% over the corresponding period of 1987, compared with a 36% gain during the whole of 1987. In the second half of 1988 export growth is likely to slow further, owing to the combined impact of rapid wage growth and won appreciation in undermining competitiveness.

S.KOREA MONEY, OUTPUT, TRADE AND PRICES





CONTENTS

Page

REGIONAL SURVEY:

- Completion of the NICs' Adjustment to the Lower
Dollar Spells Slower Growth 1
by Tim Lee

AUSTRALIA:

- Tighter Money is Necessary to Restore Better
Balance to the Economy 16
by Ian MacFarlane

ECONOMIC CAPSULES:

- Japan: The Widening of the Trade Surplus is
Temporary IPM 26
New Zealand: The Monetary Tightening is
Paying Off IPM 28



Asian Monetary Monitor is a
publication of the G.T. group of companies



John G. Greenwood
Publisher
Group Economist
G.T. Management PLC



Tim J. Lee
Editor
Economist
G.T. Management (Asia) Ltd.



Ian P. MacFarlane
Economist
G.T. Management (Asia) Ltd.



Daniel L. Gressel
Economist
G.T. Management (Asia) Ltd.



Sook Yee Li
Statistician



Michael Wong
Graphics



Isabella Ling
Administration

© ASIAN MONETARY MONITOR LTD., HONG KONG 1988

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the editor.

Asian Monetary Monitor is a bimonthly publication specialising in the analysis of economies along the Asian Pacific Rim. Sold by subscription only, price US\$200 p.a. inclusive of air mail delivery to any part of the world. Correspondence and subscriptions should be addressed to the Editor, Asian Monetary Monitor Ltd., GPO Box 12964, Hong Kong.

ASIAN MONETARY MONITOR

September - October, 1988

Vol. 12 No.5

REGIONAL SURVEY

COMPLETION OF THE NICs' ADJUSTMENT TO THE LOWER DOLLAR SPELLS SLOWER GROWTH

After two years of exceptionally rapid growth the economies of the newly industrialised countries of Asia (NICs) have, in general, slowed somewhat during 1988. However, the average rate of economic growth for the four NICs remains at a comparatively high level and the slowdown has been much less pronounced than that predicted by many analysts in the wake of the October 1987 stockmarket crash. Furthermore, as Table 1 shows, Singapore so far represents an exception to the generalised slowdown picture, since economic growth in the current year looks set to reach a higher level than that recorded for 1987.

TABLE 1: ECONOMIC GROWTH RATES FOR THE NICs

	<u>1986</u>	<u>1987</u>	<u>1988 (E)</u>	<u>1989 (F)</u>
Hong Kong	11.8%	13.5%	7%	4%
Singapore	1.8%	8.8%	10%	5%
S. Korea	12.3%	12.0%	9%	4%
Taiwan	11.6%	11.1%	7%	2%

The current cycle of rapid growth for the four NICs began in late 1985 with the beginning of the export boom which in turn was induced by the depreciation of the NICs' currencies in line with the US dollar. Growth in 1986 was predominantly export-led, as exports surged in the wake of the competitive gains arising from the real depreciations of the NICs' currencies (see Chart 1). The following year was a year of transition from export-led to domestically-led economic growth, as domestic demand in the NICs rose strongly in response to easy liquidity conditions and rising incomes (see, for the particular case of Taiwan, AMM Vol. 12 No. 3). However, export growth remained at very high levels during 1987 and the combination of the surge in domestic demand and continued growth in net external demand meant that the NICs recorded similar or even higher growth rates in 1987 than in the prior year. During 1988 external demand has tailed off quite sharply (except for Singapore's exports) so that, although domestic demand remains strong, overall growth rates are lower.

The progression from export-led growth to domestically-led growth and finally to lower overall growth accords with the classic adjustment process under fixed or managed exchange rates. This suggests that an economy operating under a fixed exchange rate which receives a boost to exports as a result of an exogenous real currency devaluation should pass through four distinct phases before it returns to 'equilibrium'. During stage one the export boom results in higher economic growth, the generation of a balance of payments surplus and,

CHART 1
NICs EXPORTS GROWTH

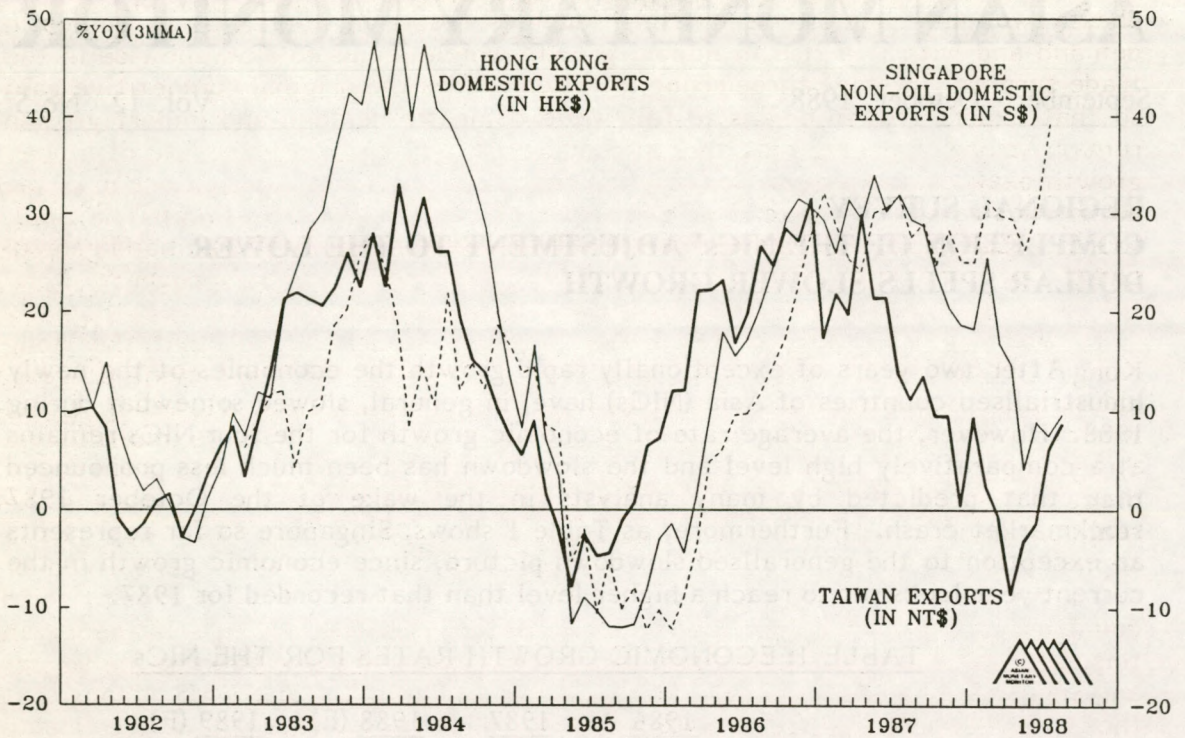
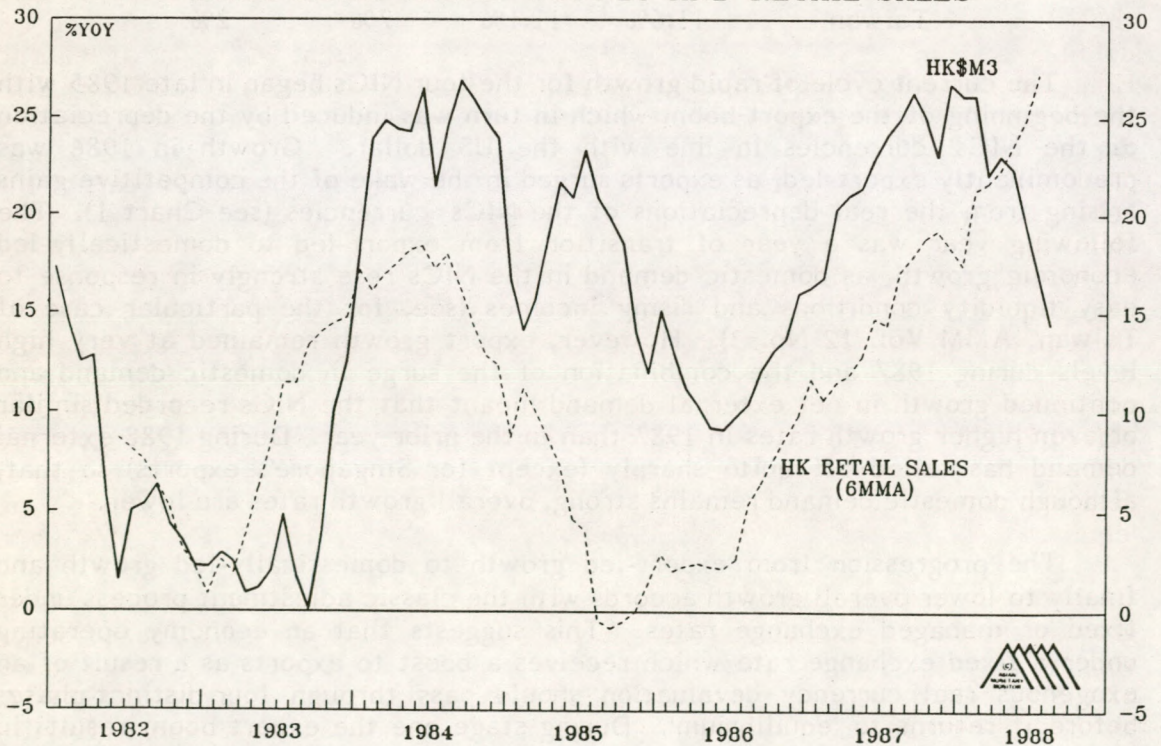


CHART 2
HONG KONG MONEY SUPPLY AND RETAIL SALES



under the fixed exchange rate regime, a higher rate of money supply growth. In phase two easy liquidity and rising incomes result in a pick-up in domestic demand and with it a rise in import growth which begins to slow the rise in the trade surplus. In stage three rising inflation erodes the original competitive gain so that export growth begins to fall while domestic demand and import growth remain strong, meaning that the current account surplus and the rate of money growth peak out and begin to fall. (Alternatively, this could also occur if the authorities revalue the exchange rate in an effort to avoid inflation.) The final, fourth, stage occurs when tightening liquidity restrains domestic demand growth and the economy slows, ultimately bringing the inflation rate back down.

Within this simplified framework, Chart 2 would suggest that the Hong Kong economy is currently undergoing stage three of the adjustment process, having passed through stage one in 1986 and stage two in 1987. However, a real world complication to the simple process described above is the multilateral dimension to the exchange rate trends of 1985-87. The classic adjustment process is most easily understood within a two country framework whereas the real currency depreciation the NICs enjoyed in 1985 and 1986 was not a depreciation against the currency to which their own currencies are fixed or managed (i.e. the US dollar), but a depreciation vis-a-vis the currencies of third countries (primarily the Japanese yen and the European currencies). In theory, in this case, inflation in the NICs should not have risen above inflation in the US for any significant length of time. A rise in inflation relative to the US means that the NICs' currencies are appreciating in real terms (the NICs are losing competitiveness) against the US dollar. If this occurs, it in turn implies that the adjustment process is leading the NICs to move away from 'equilibrium' with the US rather than towards it. In theory this should not happen, as if there has been no exogenous change in the relationship between the economies of the US and the NICs, there should be no change in the real exchange rate between the US dollar and the NICs' currencies. In practice the reason that inflation, at least in Hong Kong and also Korea, has risen above the US inflation rate (see Chart 8) is that trade flows for the NICs appear to have responded more quickly to the depreciation of the dollar-bloc currencies than trade flows for the US itself. (This issue was discussed in a previous AMM, AMM Vol. 11 No. 6). Therefore the real effective exchange rate for the dollar has remained 'undervalued' for longer than the real effective exchange rates of the NICs' currencies (except for Singapore). In the case of the NICs, real effective exchange rates have already begun adjusting back up to the level which will bring about long-term balance in the current account of the balance of payments, through higher inflation (in the case of Hong Kong and Korea) or nominal exchange rate revaluation (in the case of Taiwan). An unfortunate corollary of this analysis is that when the real effective value of the US dollar also finally recovers to its equilibrium level the NICs currencies may temporarily become 'overvalued', necessitating a period of relative deflation in the NICs before a final multilateral real exchange rate 'equilibrium' is re-established.

Charts 3 to 6 portray (domestic) export growth and (retained) import growth rates for each of the four NICs. These charts also provide evidence supporting the view that the economies of the NICs are undergoing 'stage three' of the process of adjustment to the dollar-bloc currency depreciation of 1985-86, as described above, in as much as import growth now exceeds export growth - implying a tendency to a deteriorating trade balance - for each of the NICs apart

CHART 3
TAIWAN EXPORTS AND IMPORTS GROWTH

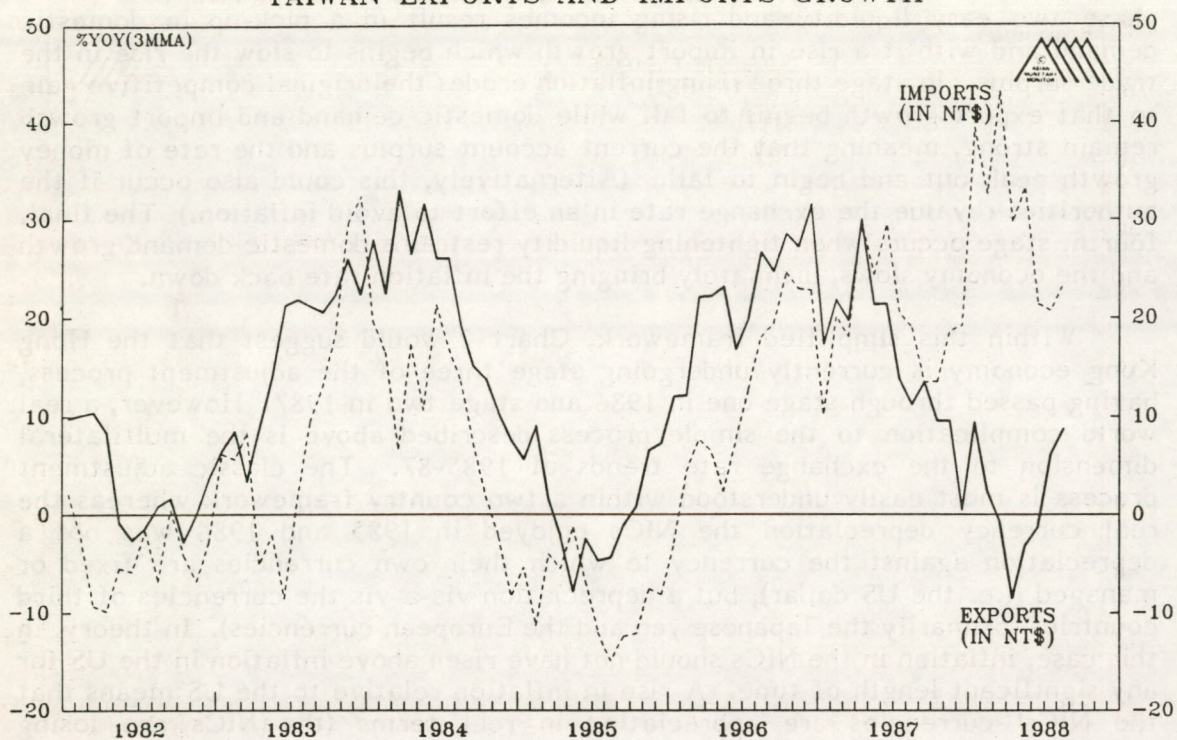


CHART 4
KOREA EXPORTS AND IMPORTS GROWTH

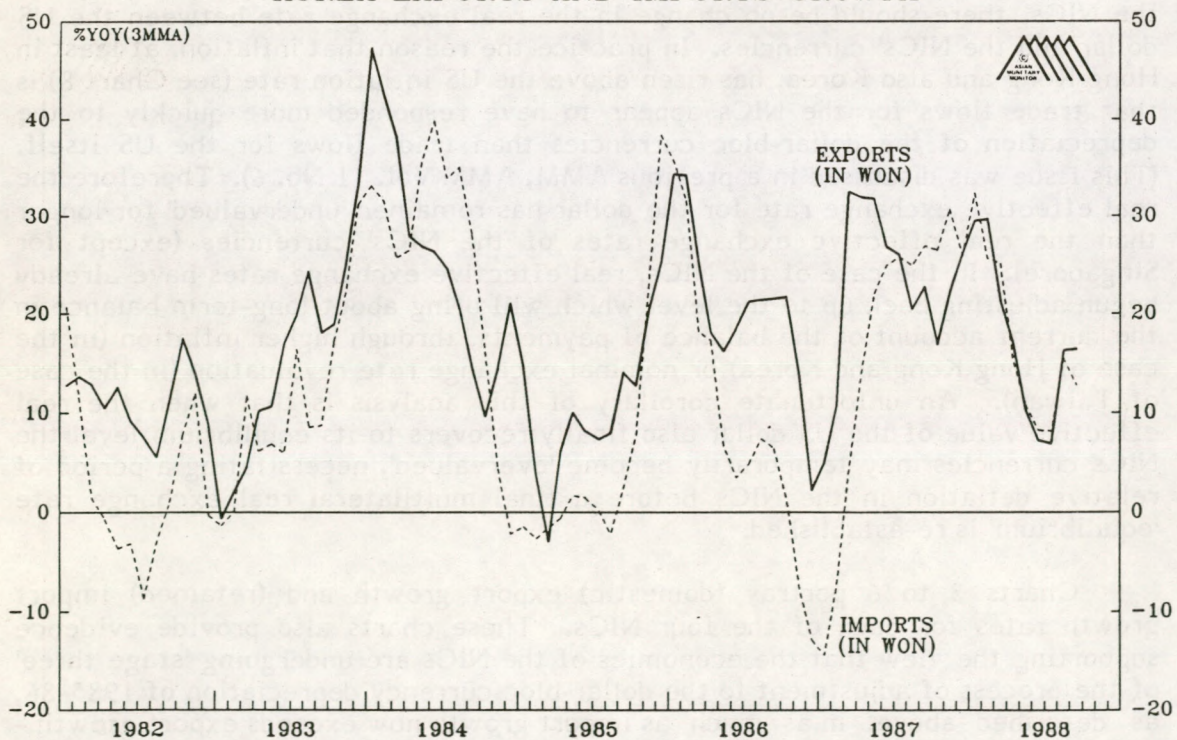


CHART 5
HONG KONG EXPORTS AND IMPORTS GROWTH

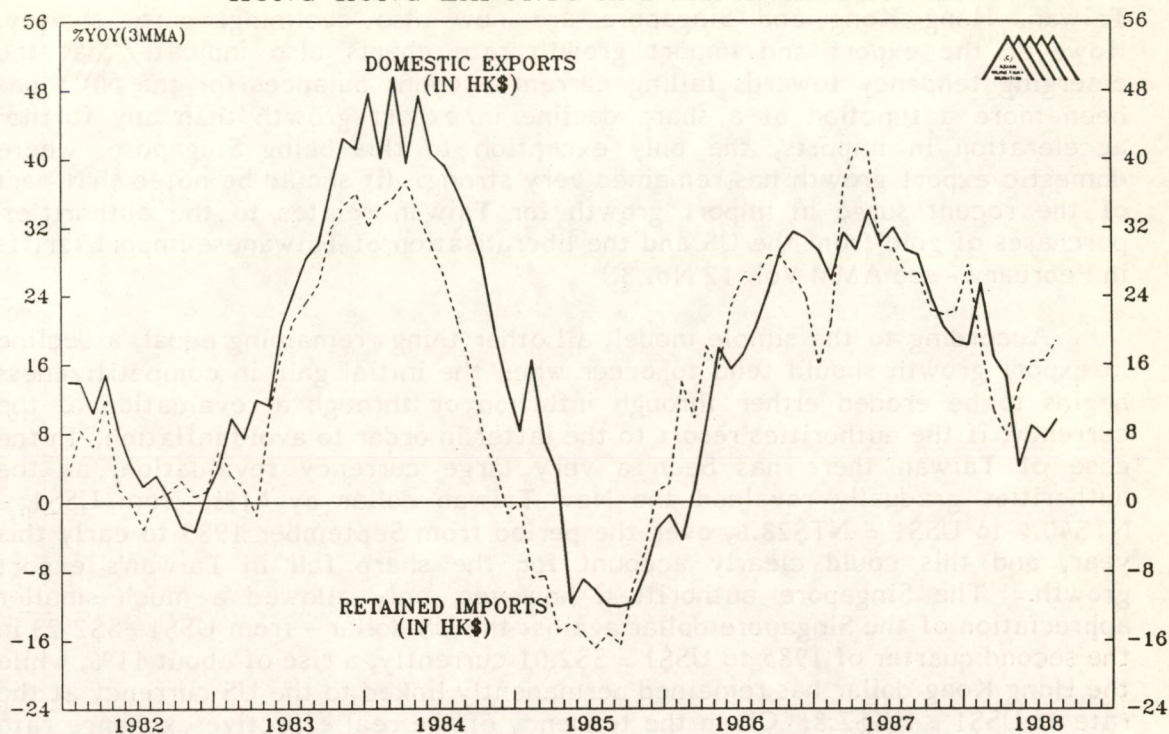
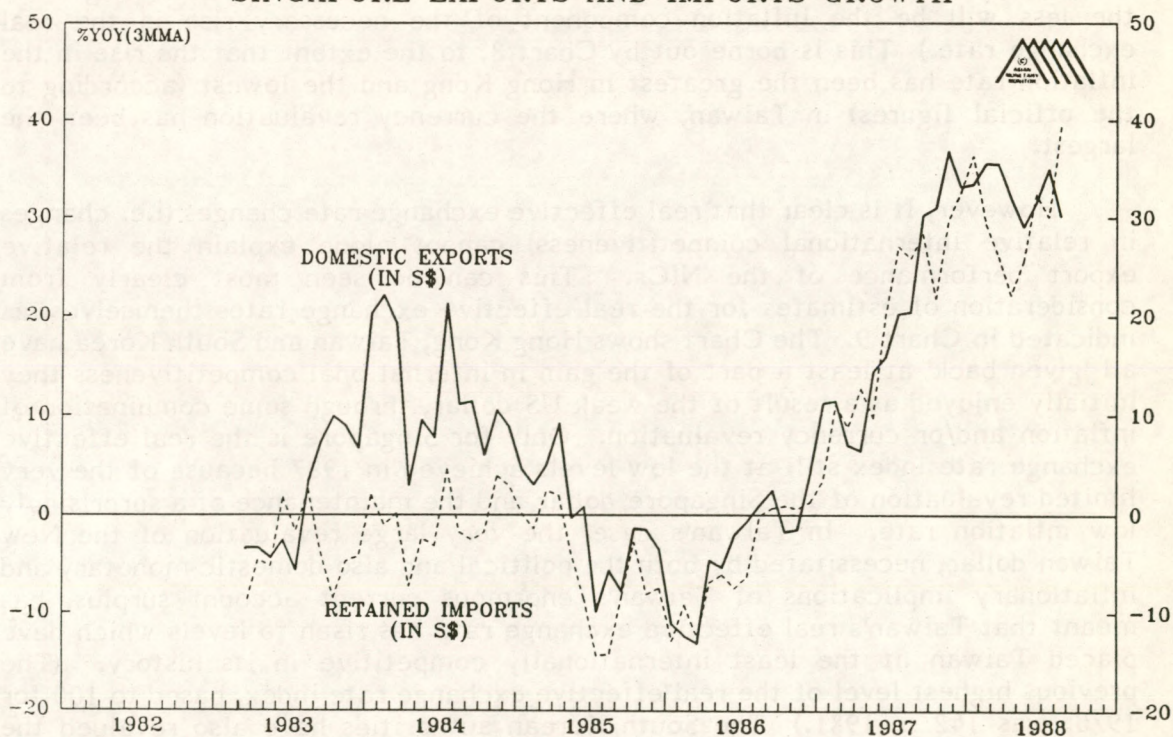


CHART 6
SINGAPORE EXPORTS AND IMPORTS GROWTH



from Korea. Chart 7 also shows clearly that money growth rates for each of Taiwan, Hong Kong and Singapore are now also declining, quite sharply. However the export and import growth rate charts also indicate that the emerging tendency towards falling current account balances for the NICs has been more a function of a sharp decline in export growth than any further acceleration in imports, the only exception to this being Singapore, where domestic export growth has remained very strong. (It should be noted that part of the recent surge in import growth for Taiwan relates to the authorities' purchases of gold from the US and the liberalisation of Taiwanese import tariffs in February - see AMM Vol. 12 No. 3.)

According to the simple model, all other things remaining equal, a decline in export growth should tend to occur when the initial gain in competitiveness begins to be eroded either through inflation or through a revaluation of the currency, if the authorities resort to the latter in order to avoid inflation. In the case of Taiwan there has been a very large currency revaluation, as the authorities gradually revalued the New Taiwan dollar by 41%, from US\$1 = NT\$40.4 to US\$1 = NT\$28.6, over the period from September 1985 to early this year, and this could clearly account for the sharp fall in Taiwan's export growth. The Singapore authorities, however, only allowed a much smaller appreciation of the Singapore dollar against the US dollar - from US\$1 = S\$2.23 in the second quarter of 1985 to US\$1 = S\$2.01 currently, a rise of about 11%, while the Hong Kong dollar has remained permanently linked to the US currency at the rate of US\$1 = HK\$7.8. Given the tendency of the real effective exchange rate to self-correct to the fall initially resulting from the drop in the dollar, we should expect to see inflation rise in countries where there has been little or no currency revaluation, the rise in inflation being lower the greater any nominal revaluation of the currency. (The greater the rise in the nominal exchange rate the less will be the inflation component of the necessary rise in the real exchange rate.) This is borne out by Chart 8, to the extent that the rise in the inflation rate has been the greatest in Hong Kong and the lowest (according to the official figures) in Taiwan, where the currency revaluation has been the largest.

However, it is clear that real effective exchange rate changes (i.e. changes in relative international competitiveness) cannot alone explain the relative export performance of the NICs. This can be seen most clearly from consideration of estimates for the real effective exchange rates themselves, as indicated in Chart 9. The Chart shows Hong Kong, Taiwan and South Korea have all 'given back' at least a part of the gain in international competitiveness they initially enjoyed as a result of the weak US dollar, through some combination of inflation and/or currency revaluation. Only for Singapore is the real effective exchange rate index still at the low levels achieved in 1987 because of the very limited revaluation of the Singapore dollar and the maintenance of a surprisingly low inflation rate. In Taiwan's case, the very large revaluation of the New Taiwan dollar, necessitated by both the political and also domestic monetary and inflationary implications of Taiwan's enormous current account surplus, has meant that Taiwan's real effective exchange rate has risen to levels which have placed Taiwan at the least internationally competitive in its history. (The previous highest level of the real effective exchange rate index, based to 100 for 1970, was 142 in 1981.) The South Korean authorities have also revalued the exchange rate for their currency vis-a-vis the dollar, albeit by not as much as

CHART 7
MONETARY GROWTH IN THE NICs

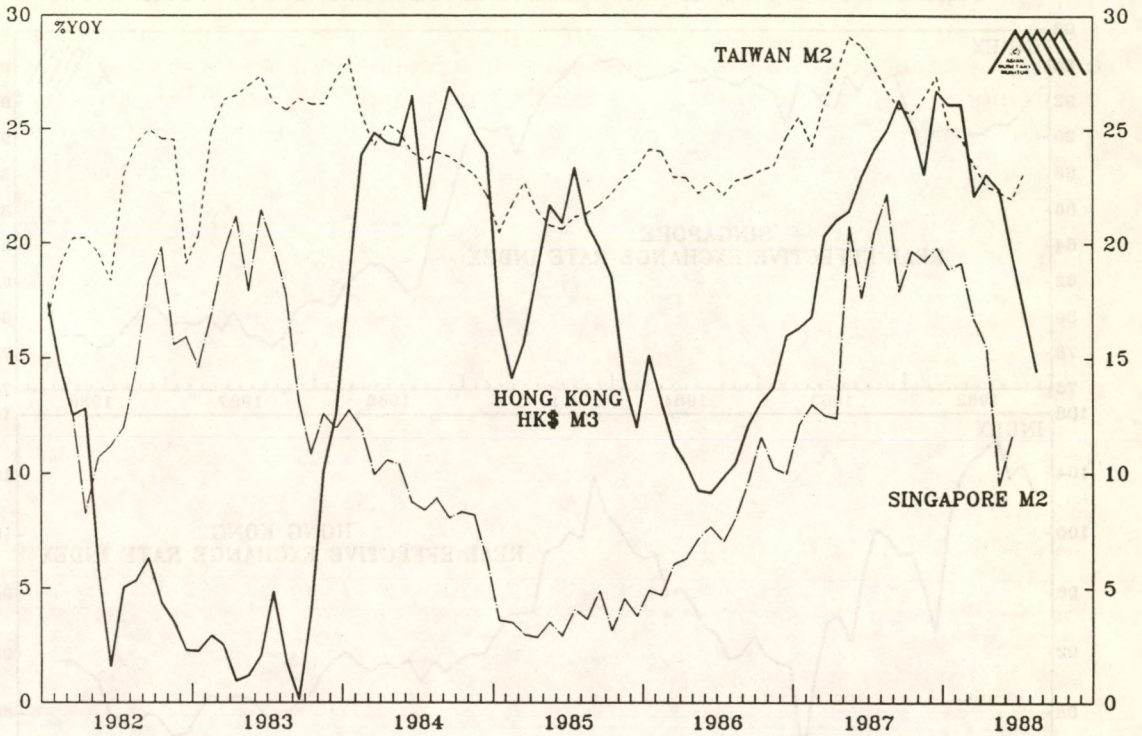


CHART 8
CONSUMER PRICE INFLATION IN THE NICs

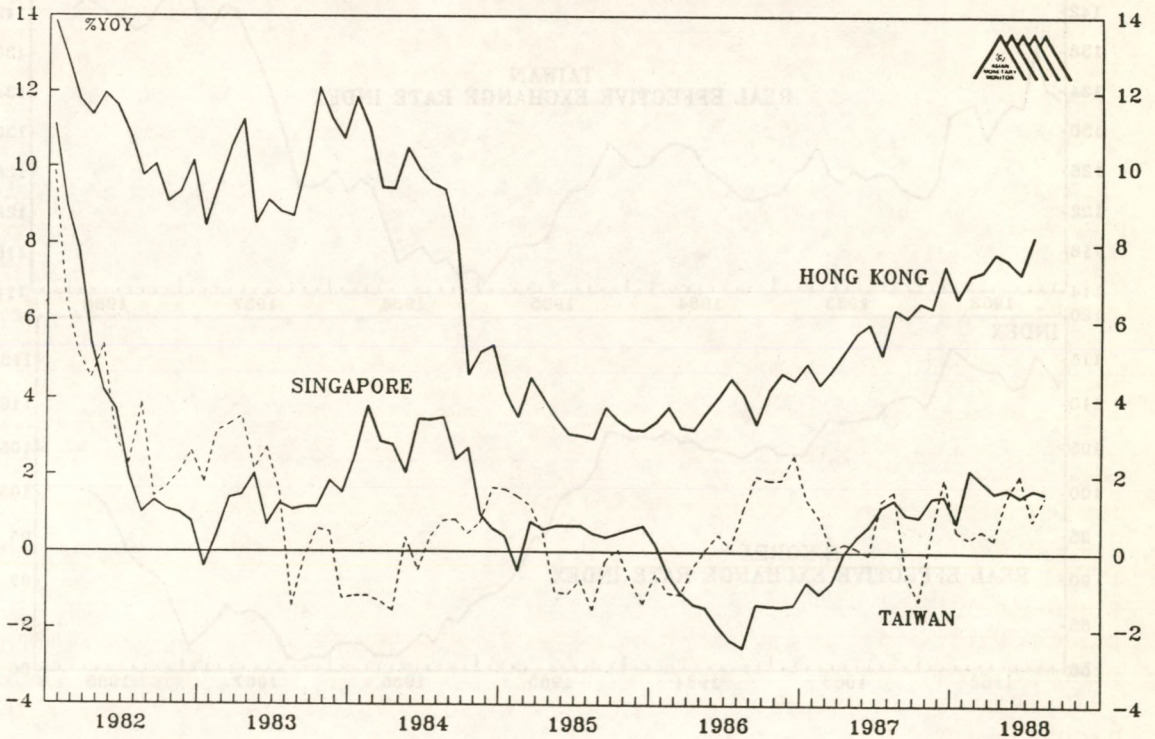
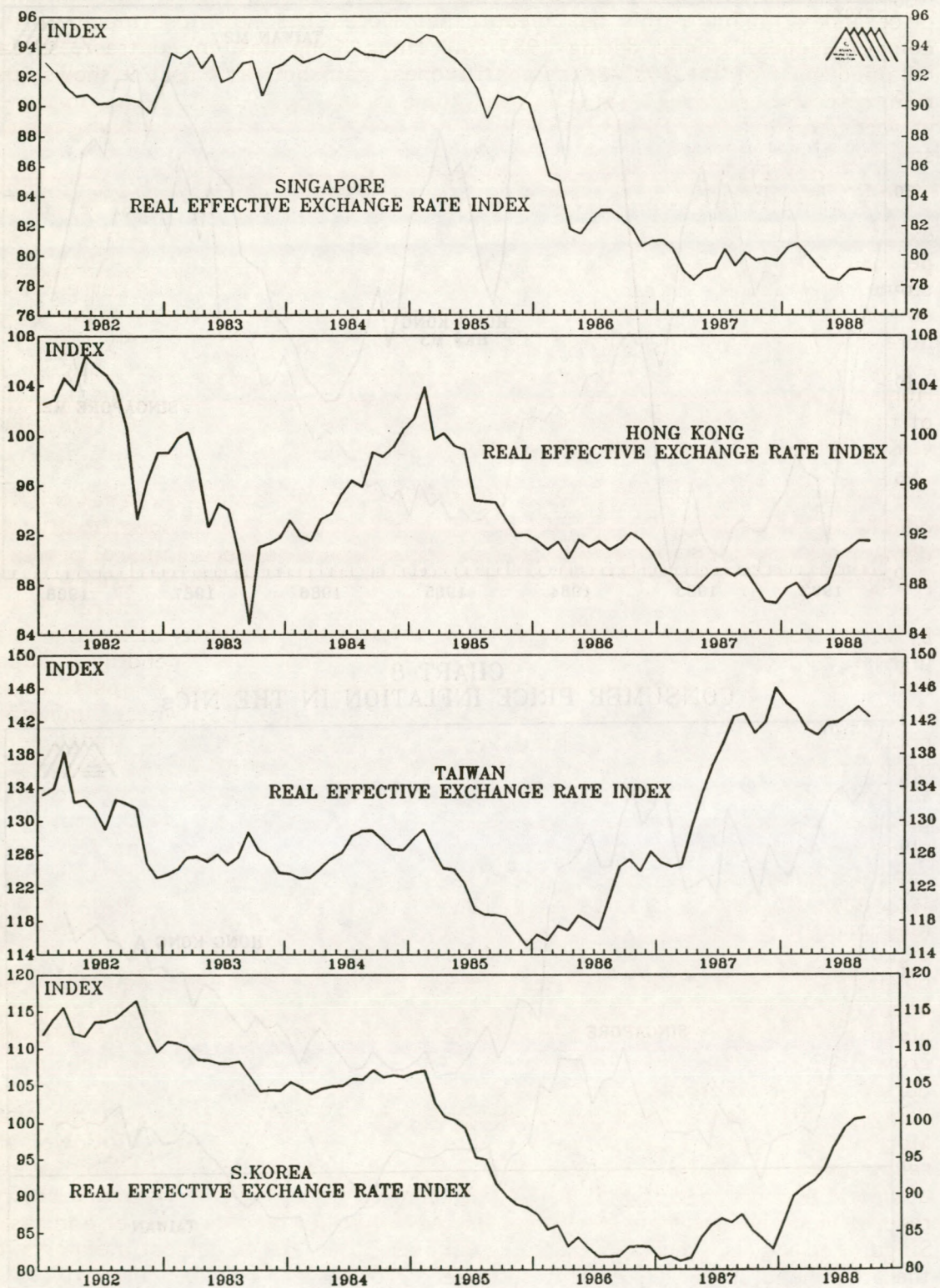


CHART 9 REAL EFFECTIVE EXCHANGE RATES FOR THE NICs



Taiwan (the Korean won has risen by 12% against the dollar so far this year), and in combination with a comparatively high inflation rate (7.9% for the consumer price index in July), this has meant that Korea has now lost much of the competitiveness gained during 1985-86. Hong Kong has, in contrast, so far retained most of the 1985-86 competitiveness gain but, as Chart 9 shows, the real effective exchange rate for the Hong Kong dollar has begun to creep upwards during 1988 primarily because the inflation rate in Hong Kong is now somewhat higher than in most of the territory's trading partners.

Although competitiveness factors, as indicated by the real effective exchange rates shown in Chart 9, could explain why Singapore's export performance is currently so much better than that of the other NICs, they cannot explain why Hong Kong's domestic export performance is currently so comparatively poor. As Chart 1 indicates, even in local currency terms (used here because the local currency value figures equate most closely with the export volume figures) Taiwan's export growth rate is currently very similar to Hong Kong's, at around 10% year-on-year (when seen in US dollar terms, because of the rise in the New Taiwan dollar, it is higher) and, as can be seen from Chart 4, Korea's export growth rate is significantly higher.

The other important influence affecting relative export growth rates is the demand associated with the world business cycle, or more specifically the demand for the exports for each of the NICs given the differing mix of products produced by each of the countries. The current stage of the world business cycle - near the end of the sixth year of global economic expansion - is characterised by very strong capital spending worldwide, as industrial capacity utilisation is at high levels in all of the major economies, and firm consumer spending in Japan and Europe, but comparatively weak consumer spending - particularly discretionary spending on non-durable items - in the US, where monetary conditions have been tight and real wage growth low. All other things being equal, therefore, we might expect to see business cycle influences resulting in strong growth in the NICs' exports of capital goods generally, and good growth in consumer goods exports to Japan and western Europe, but weak growth in exports of consumer goods, particularly non-durable items, to the US. This expectation is indeed supported by Charts 10 to 12, in which (domestic) exports for Singapore, Hong Kong, and Taiwan have been broken down into exports of machinery and transport equipment - as a rough proxy for capital goods - and exports of other items. The charts most clearly illustrate that for each of the countries the growth rate of exports of machinery and transport equipment has been far higher than the growth rate of other exports, as should be expected given the very strong trend in worldwide capital spending. For Singapore, the growth rate of machinery exports has risen further, from already high levels, during 1988, to reach nearly 50% year-on-year, while the growth rate of other domestic exports weakened somewhat over the first two quarters of the year. More interestingly, Chart 11 shows that Hong Kong's exports have followed the same pattern. Despite the apparently disappointing performance of overall domestic exports referred to earlier and illustrated in Charts 1 and 5, the growth rate of Hong Kong's machinery exports has continued at a high level and, as in Singapore, has risen during 1988 to reach over 30%. Other domestic exports, on the other hand, have weakened to show zero growth year-on-year currently.

However, the most interesting information from Charts 10 to 12 can be

CHART 10
SINGAPORE: DOMESTIC EXPORTS PERFORMANCE

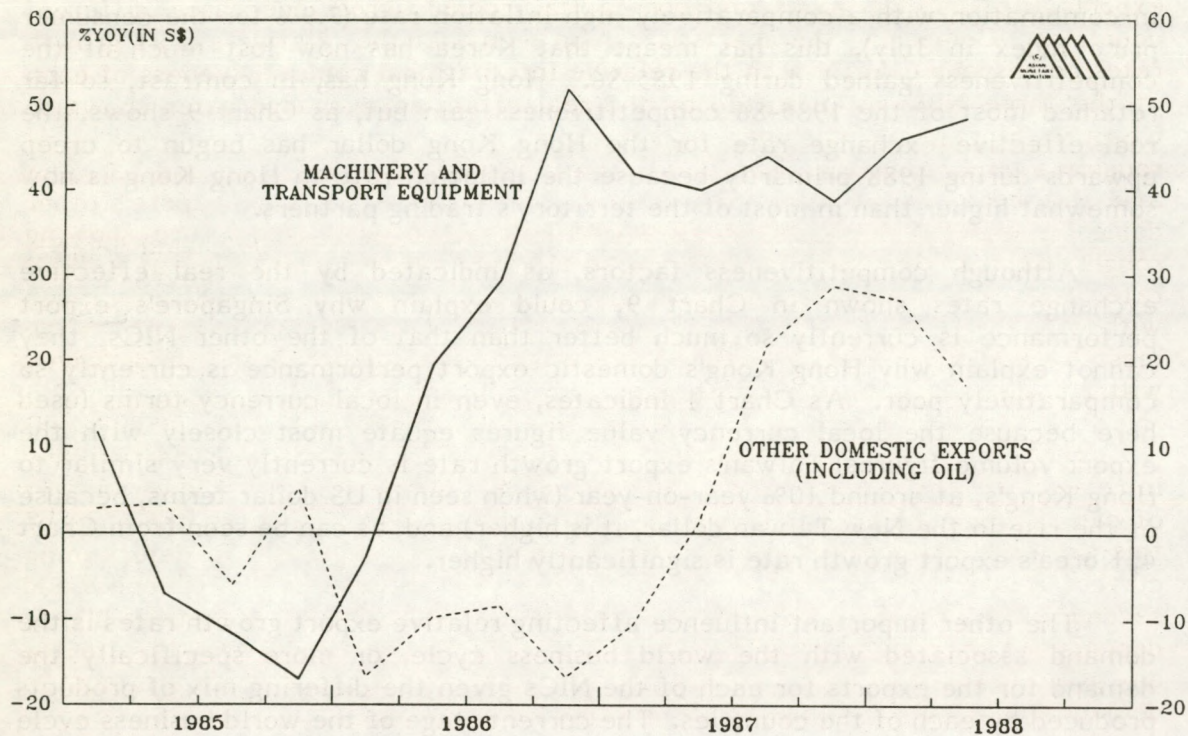
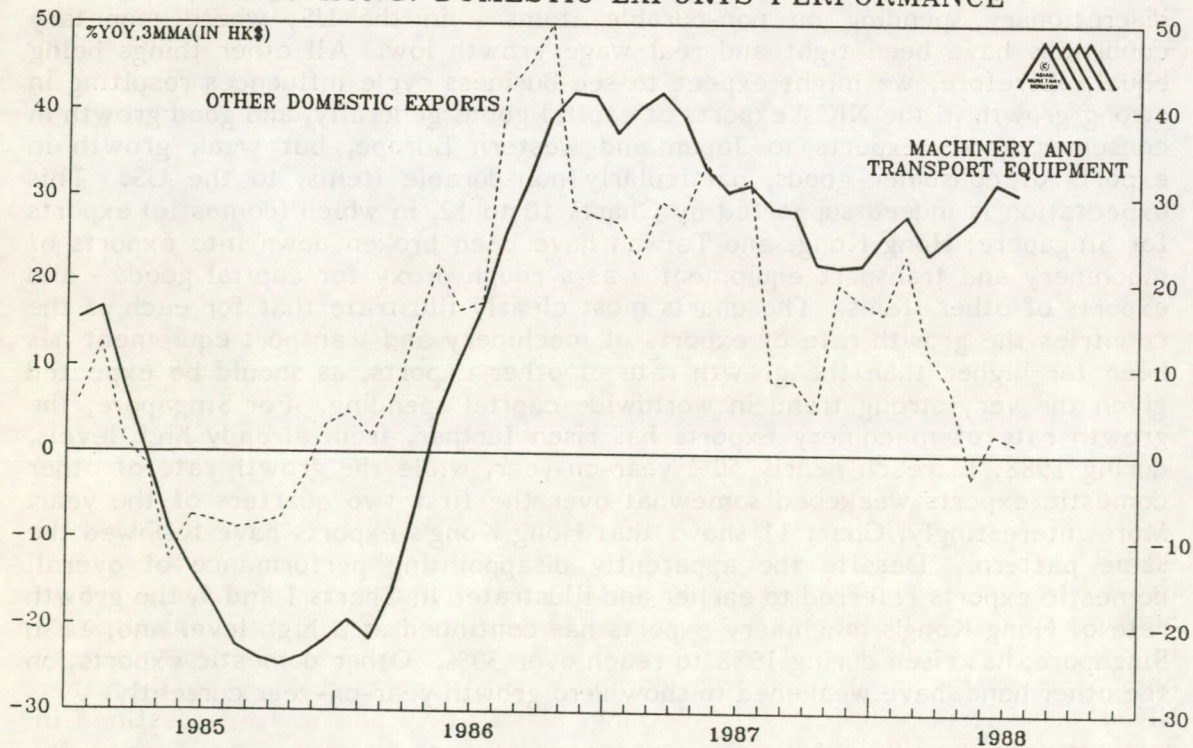


CHART 11
HONG KONG: DOMESTIC EXPORTS PERFORMANCE



gleaned from a comparison of the growth performance of the two categories of exports (i.e. capital goods and non-capital goods) across the three different countries. Comparing the charts it can be seen that the relative export growth rates correspond exactly with the relative international competitiveness of each of the three NICs as indicated by the real effective exchange rates shown in Chart 9. Singapore's machinery and transport equipment exports are growing at roughly a 50% rate, Hong Kong's machinery exports at a 30% rate and Taiwan's at a rate below 10% (Chart 12). Similarly, for other exports, Singapore's other domestic exports are growing at a 15%-20% rate, Hong Kong's are showing roughly zero growth, and Taiwan's non-machinery exports are falling at a -10% rate, year-on-year. This 'ranking' of export growth rates corresponds very much with what might be expected from Chart 9 which suggests that Singapore is the most 'competitive' of the three countries and Taiwan the least 'competitive', with Hong Kong somewhere in between.

Hong Kong's overall comparatively 'poor' export performance, particularly in relation to Korea and Taiwan, can then be seen as the result of a lower weight of capital goods exports in overall exports. Or, in other words, on the basis of this analysis, two factors can be seen as particularly important in determining current relative export performance - firstly, international competitiveness and secondly, the relative dependence on capital goods exports. At present, a higher dependence on capital goods results in a higher overall export growth rate for any given level of competitiveness, because it is capital goods which are most in demand at the current stage of the world business cycle.

Rough approximations for the relative weights of capital goods and, also, consumer non-durables, in total exports are set out below for each of the NICs. Figures in brackets for Singapore refer to the weights in non-oil domestic exports because there is a case for excluding refined oil exports from domestic exports (as they are in Chart 1, but not in Charts 6 and 10) because the value added to the economy in refining imported oil is low.

TABLE 2: BREAKDOWN OF DOMESTIC EXPORTS

Percentage of domestic exports (approximate)

	<u>Capital Goods</u>	<u>Consumer non-durables</u>	<u>Others</u>
Singapore	45% (65%)	10% (15%)	45% (20%)
Hong Kong	25%	55%	20%
Taiwan	40%	40%	20%
Korea	35%	40%	25%

In respect of capital goods, the table merely shows what must necessarily be true given the relative growth rates of exports and export components shown in Charts 3-6 and Charts 10-12, namely a high weighting of capital goods in Singapore's domestic exports but a comparatively low weighting of capital goods in Hong Kong's domestic exports. Hong Kong can also be seen to have a very high dependence on consumer non-durable goods exports relative to the other NICs, these items being largely clothing, plastic toys and watches destined in particular for the US, but also for Europe.

Charts 13 to 16 portray a different slant on essentially the same information, in terms of the destination of exports for Singapore, Hong Kong and Taiwan. Because over the 1985-87 period NICs' currencies have been weak against the Japanese and European currencies but not against the US dollar (i.e. the gain in competitiveness has been against Japan and Europe, not against the US) it should be expected that growth in NICs' exports to Japan and western Europe will be running at a far more rapid pace than growth in exports to the US. Charts 14 and 15 for Hong Kong and Taiwan show that for these two countries this is indeed the case. For both countries the growth rate of exports to all destinations has declined over the past year but growth in exports to Japan and Europe remains quite strongly positive whereas to the US exports are declining sharply. However, for Singapore, as Chart 13 shows, exports to the US have continued to grow strongly and the growth rate is currently outpacing that for domestic exports to Japan. In the case of Singapore, the fact that there has been a large gain in competitiveness vis-a-vis Japan but not against the US is overwhelmed by the cyclical trends in demand for Singapore's output. Capital spending by US manufacturing industries has been extremely strong this year, and Singapore is a large exporter of capital goods (as shown in Table 2), and also of electrical and electronic components and parts (which form the largest part of other non-oil exports in Table 2), the demand for which is also to some extent related to capital spending trends in the manufacturing industry. In a similar vein, Hong Kong's and Taiwan's exports to the US have been additionally harmed by the fact that a high percentage of goods shipped to the US are consumer goods, spending on which has represented the weakest area of the US economy over the past year, and in particular clothing, US retail sales of which have been markedly weak. As a category, garments and textiles represent about 40% of Hong Kong's and 17% of Taiwan's total domestic exports.

FORECAST: To summarise, the economies of the NICs have reached a fairly advanced stage in the process of adjustment to the sharp decline in the real effective value of their currencies - a one-off gain in competitiveness - during 1985-1987. For each of Taiwan, Hong Kong and Singapore import growth now exceeds export growth and money supply growth is declining. Domestic demand remains firm in each of the economies, but should begin to cool, following the decline in money growth.

In the classical model of the adjustment process export growth eventually slows because competitiveness is eroded either through inflation or through appreciation of the nominal exchange rate, as the real effective exchange rate tends back to its equilibrium level. In the present case of Taiwan, more than the whole of, and for Korea much of, the gain in competitiveness of 1985-86 has indeed now been lost. However, a second factor is currently playing as large a role as competitiveness in determining the relative export performance of the NICs, and that is the world business cycle, and in particular the divergent trends in the demand for capital goods and the demand for consumer non-durable items. Hong Kong's reliance on exports of consumer non-durables to the US has worked against favourable competitiveness factors to produce a fairly poor domestic export performance this year. For Taiwan, however, a relatively greater dependence on capital goods exports has mitigated, to a degree, a large loss in international competitiveness to keep overall export growth positive. Both competitiveness and business cycle factors have worked strongly in

CHART 12
TAIWAN: EXPORTS PERFORMANCE

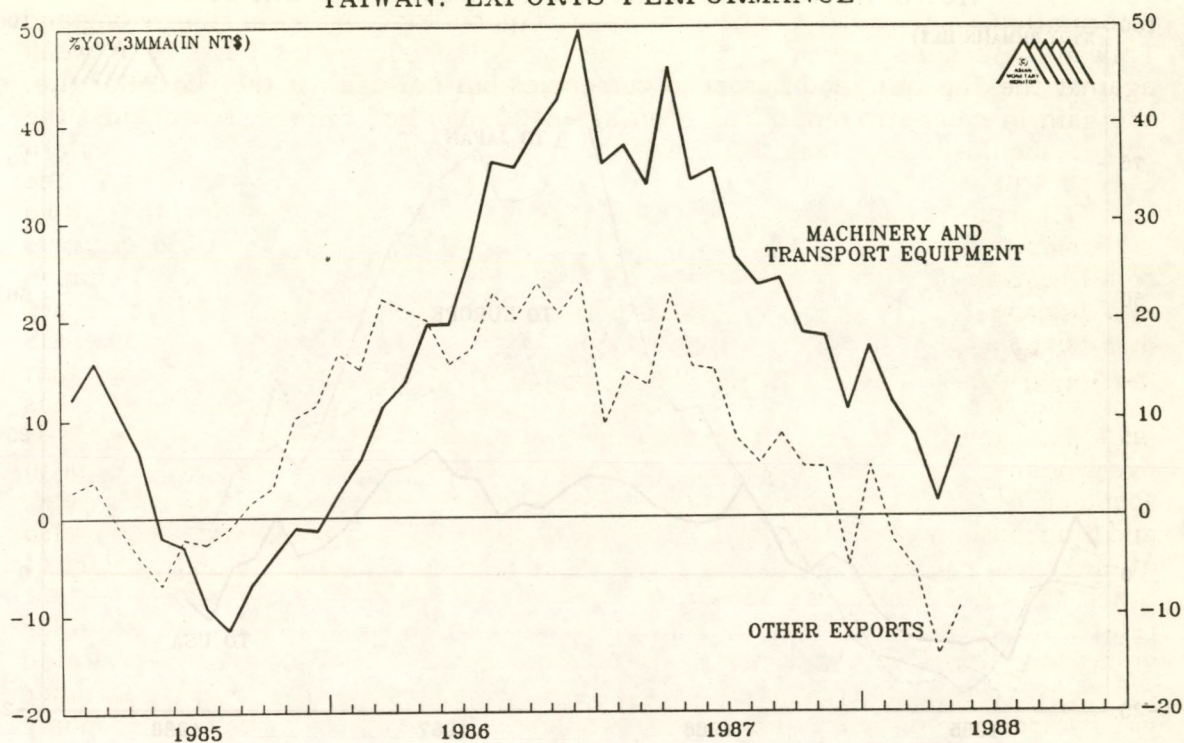


CHART 13
SINGAPORE: DESTINATION OF DOMESTIC EXPORTS

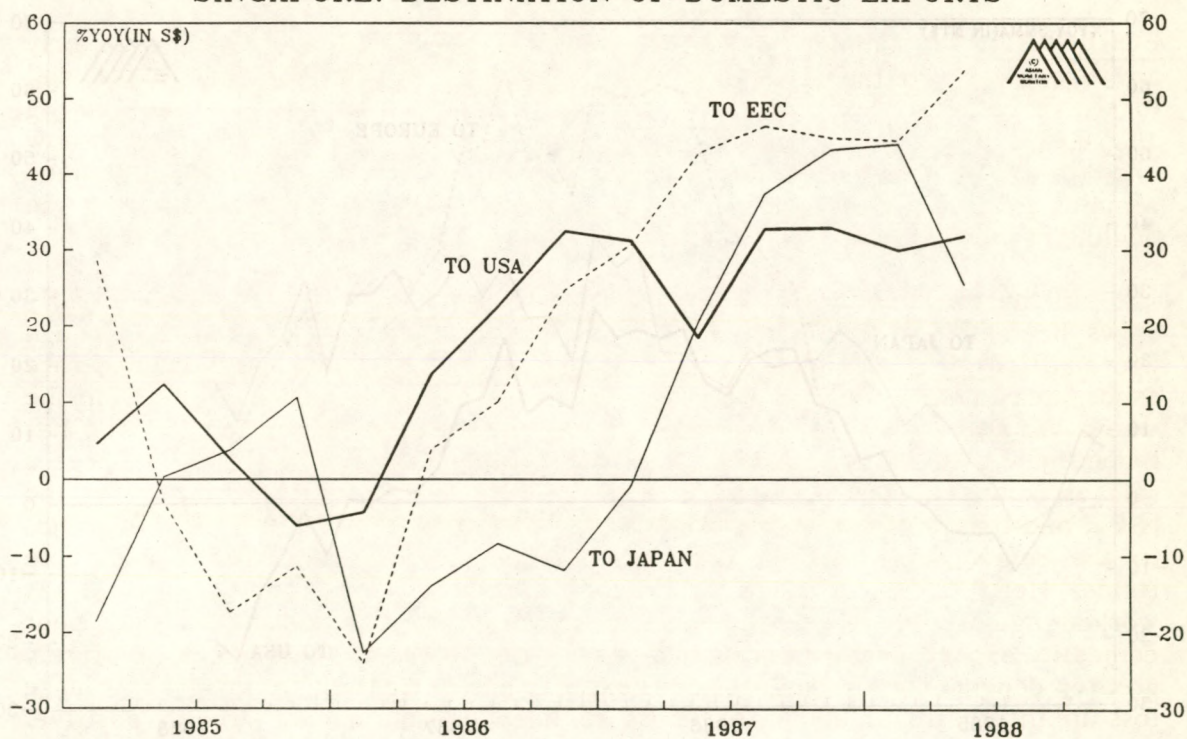


CHART 14
HONG KONG: DESTINATION OF DOMESTIC EXPORTS

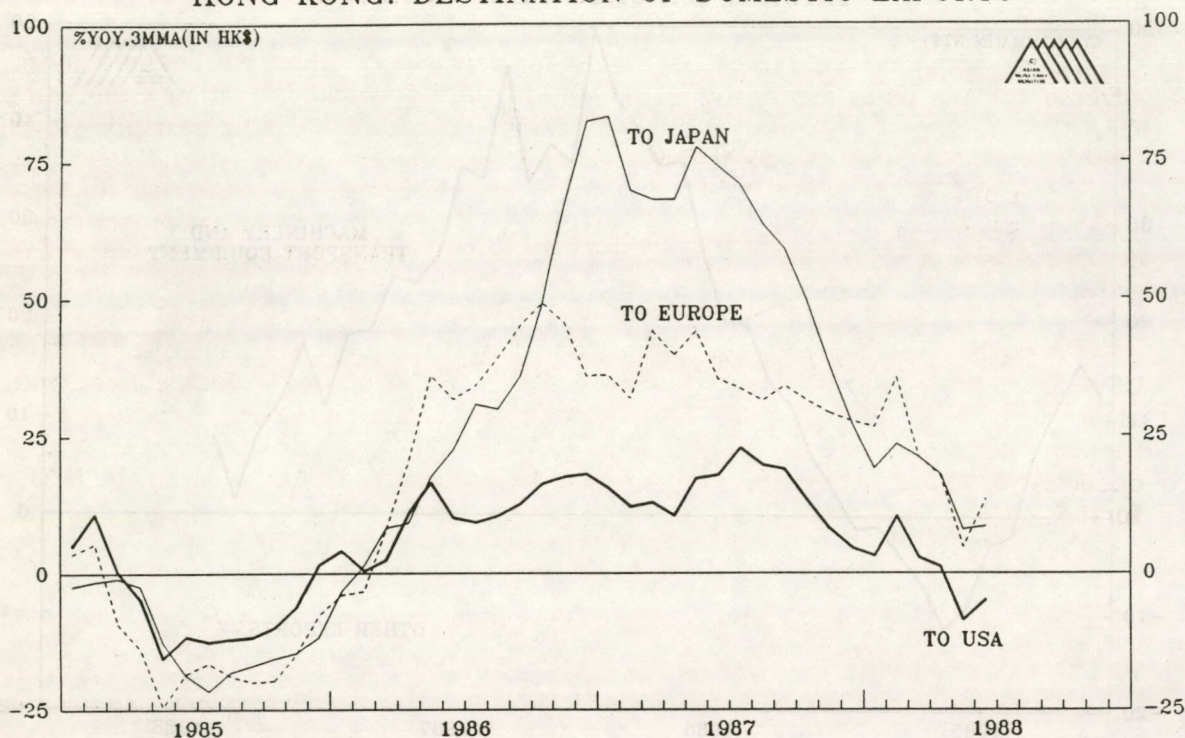
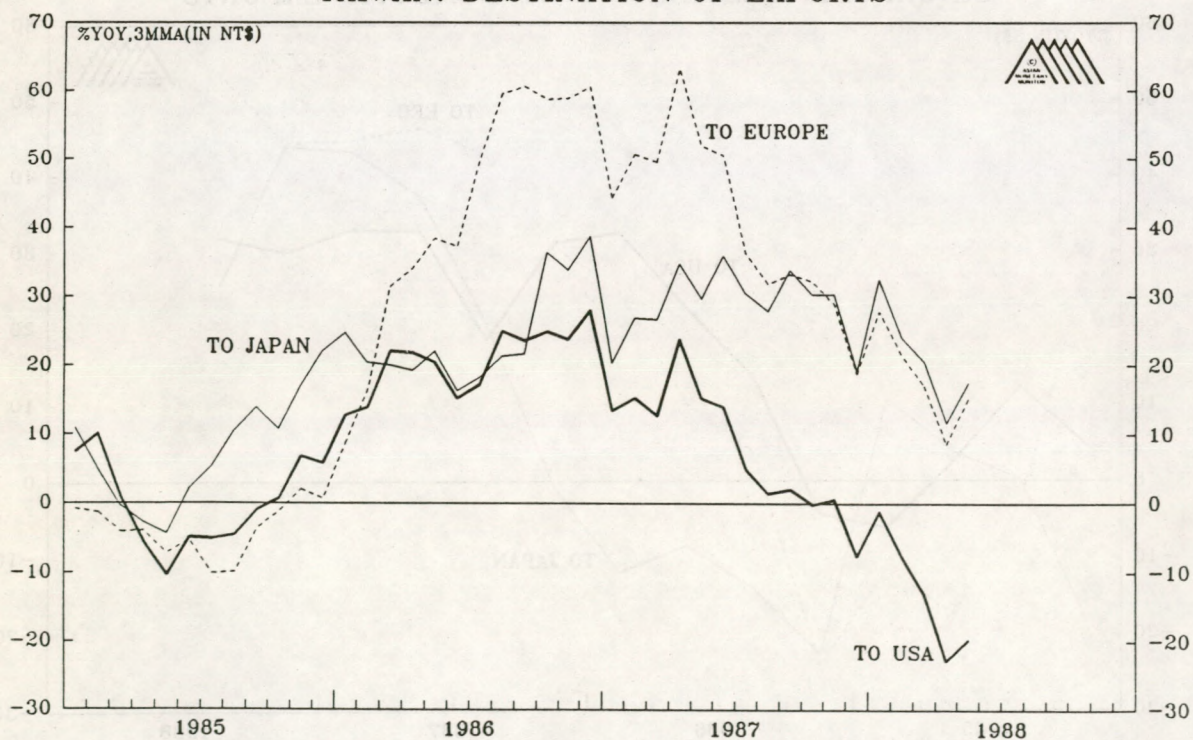


CHART 15
TAIWAN: DESTINATION OF EXPORTS



Singapore's favour to mean that Singapore's export growth has not yet slowed at all.

Over the next year business cycle influences are likely to become more adverse for the NICs as consumer demand in the US weakens further (see AMM Vol. 12 No. 3 pp. 1-2) and worldwide capital spending growth possibly slows somewhat from current very high levels. In the meantime competitiveness is likely to continue to deteriorate as real effective exchange rates rise further, meaning that export growth will continue to decline. With weaker domestic demand, these factors are likely to result in a significant further slowdown in growth for the NICs in 1989.

A possibly greater worry is the much slower rate of trade adjustment in the US than in the NICs. This could mean that the US dollar rises in value sometime after the NICs have already completed their own adjustment, leading to a further rise in the real effective exchange rates for the NICs currencies. If this occurred it would then necessitate a period of disinflation/deflation in the NICs, further extending the period of slow economic growth.

The pattern of economic growth

Early this year growing concern was expressed at the imbalanced nature of the acceleration in Australian economic activity and the policy response by the Australian authorities (see AMM Vol. 12 No. 2). Inordinate emphasis was being placed on fiscal policy as a tool of demand management, while monetary policy was virtually ignored. Consequently, as a result of easy monetary conditions, private sector domestic demand remained very strong, while net exports were falling (see Chart 1). The lower cost of servicing Australia's foreign debt in Australian dollar terms and improving terms of trade dented the negative impact on Australia's current account, which continued to show an improvement. But Australia remained very vulnerable to falling or stagnant commodity prices.

The policy mix

From April the dangers began to be recognised by the Reserve Bank, which began a progressive tightening of monetary policy. Since April the central bank has engineered several rises in interest rates, with the 3 month Treasury bill rate rising from lows of 8.83% to 13.5% and the prime lending rate from 13% to

AUSTRALIA

TIGHTER MONEY IS NECESSARY TO RESTORE BETTER BALANCE TO THE ECONOMY

Introduction

Over the last six months the Australian government has taken a number of steps to place the economy on a sounder footing. In the May mini-budget the corporate tax rate was cut and it was announced that tariffs on manufactured goods are to be considerably reduced over the next three years. In conjunction with a programme of cautious and slow deregulation, the measures are likely to enhance the economy's long run productive potential. Along with the elimination of double taxation of dividends, the announcement of these measures also allowed Australia's equity and fixed interest markets to become decoupled from the rest of the world, and for a time resulted in a relative outperformance by the Australian markets. More good news followed in the August budget when a projected surplus of A\$5.5 billion was forecast on the commonwealth government accounts. The surplus is likely to be sufficient to eliminate the deficit on the more broadly defined public sector accounts and allow substantial debt retirement.

Nevertheless, while the savings investment gap in the public sector has been eliminated that of the private sector has again begun to widen. Despite an apparent movement towards a better balance between monetary and fiscal policy, economic activity continues to remain buoyant. Sentiment in the Australian markets is consequently now moving back into line with the rest of the world, where rising interest rates are the main consideration. In Australia the problems are being compounded by inadequate techniques of monetary control.

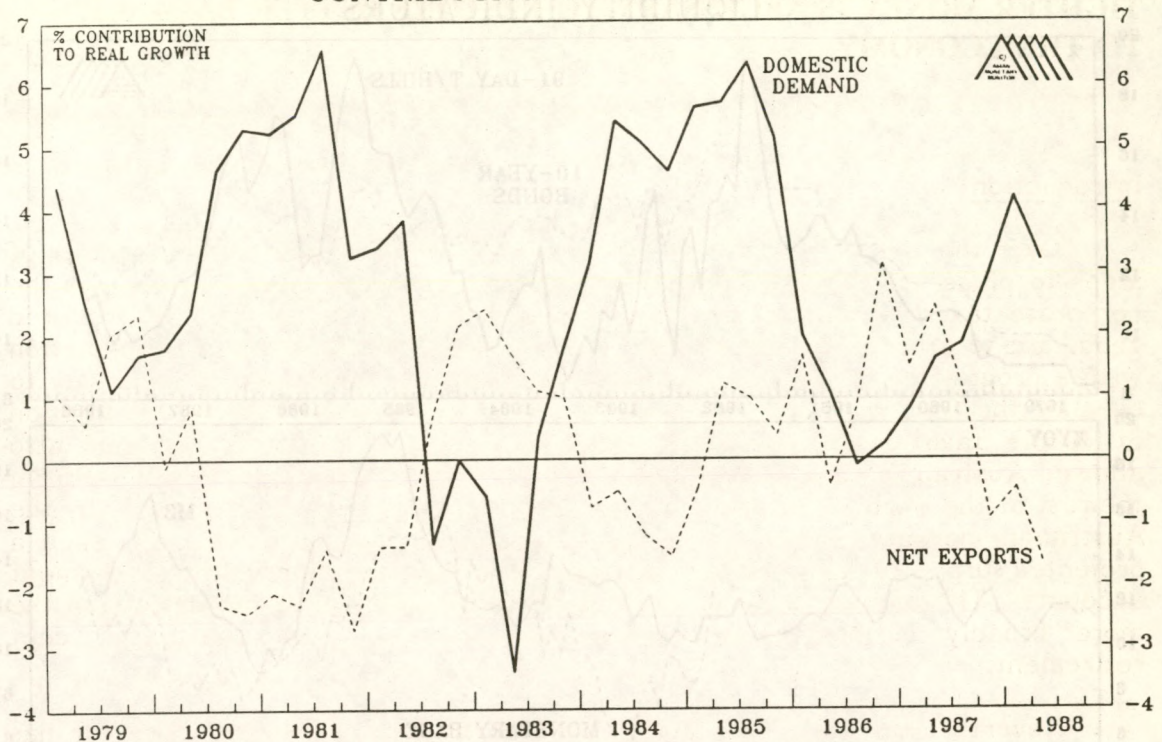
The pattern of economic growth

Early this year growing concern was expressed at the imbalanced nature of the acceleration in Australian economic activity and the policy response by the Australian authorities (see AMM Vol. 12 No. 2). Inordinate emphasis was being placed on fiscal policy as a tool of demand management, while monetary policy was virtually ignored. Consequently, as a result of easy monetary conditions private sector domestic demand remained very strong, while net exports were falling (see Chart 1). The lower cost of servicing Australia's foreign debt in Australian dollar terms and improving terms of trade dwarfed the negative impact on Australia's current account, which continued to show an improvement. But Australia remained very vulnerable to falling or stagnant commodity prices.

The policy mix

From April the dangers began to be recognised by the Reserve Bank, which began a progressive tightening of monetary policy. Since April the central bank has engineered several rises in interest rates, with the 3 month Treasury bill rate rising from lows of 9.83% to 13.9% and the prime lending rate from 13% to

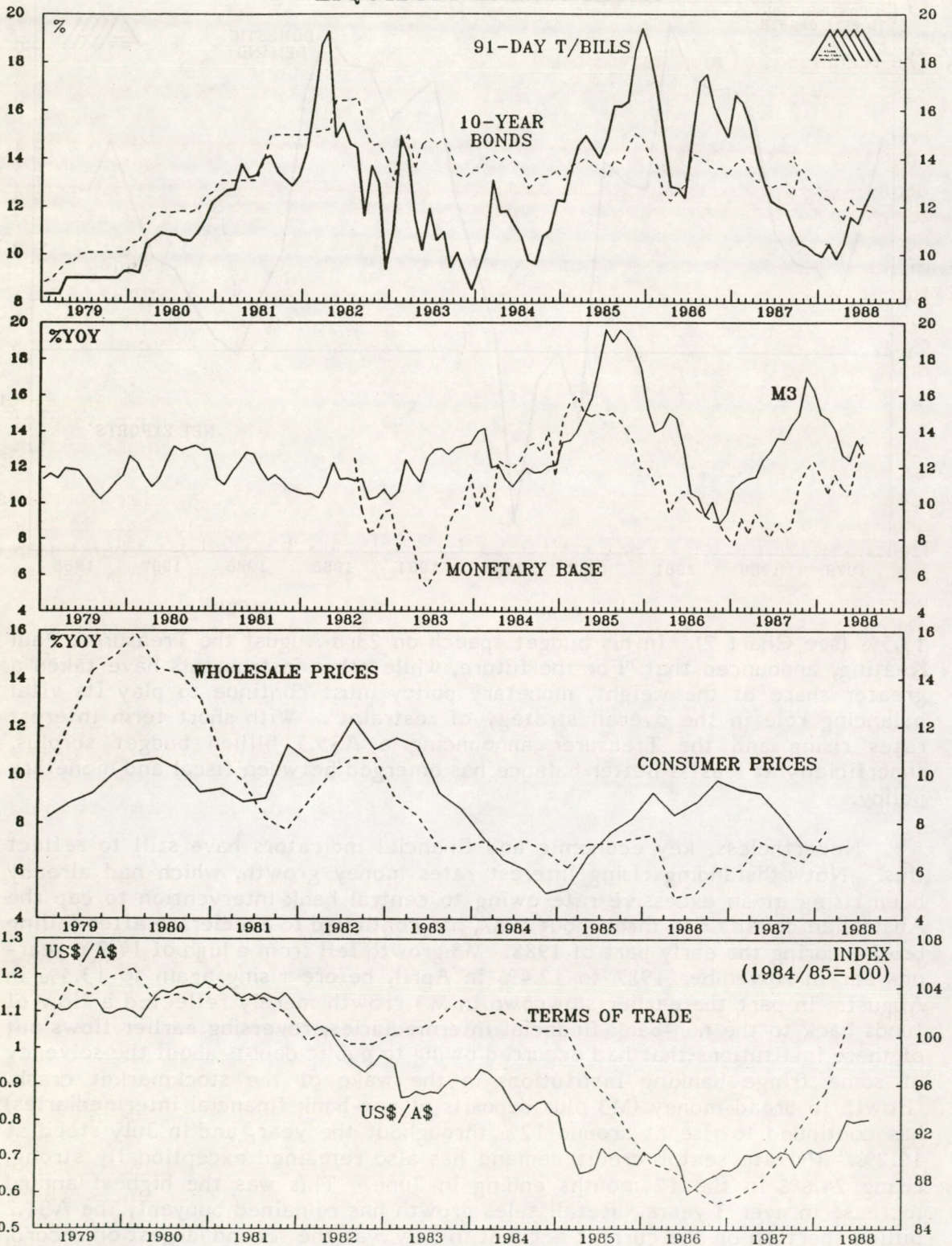
AUSTRALIA: CHART 1 CONTRIBUTION TO REAL GROWTH



15.5% (see Chart 2). In his budget speech on 23rd August the Treasurer, Paul Keating, announced that "For the future, while other instruments have taken a greater share of the weight, monetary policy must continue to play its vital balancing role in the overall strategy of restraint". With short term interest rates rising and the Treasurer announcing a A\$5.5 billion budget surplus, superficially at least a better balance has emerged between fiscal and monetary policy.

Nevertheless, key economic and financial indicators have still to reflect this. Notwithstanding rising interest rates money growth, which had already been rising at an excessive rate owing to central bank intervention to cap the Australian dollar's rise throughout 1987, has continued to accelerate after falling briefly during the early part of 1988. M3 growth fell from a high of 14.7% year-on-year in November 1987 to 12.4% in April, before rising again to 13.5% in August. In part the earlier slowdown in M3 growth merely reflected a flow of funds back to the non-bank financial intermediaries, reversing earlier flows out of these institutions that had occurred owing to public doubts about the solvency of some fringe banking institutions in the wake of the stockmarket crash. Growth in broad money (M3 plus deposits of non-bank financial intermediaries) has continued to rise at around 12% throughout the year, and in July stood at 12.2%. Private sector credit demand has also remained exceptionally strong, rising 24.6% in the 12 months ending in June. This was the highest annual increase in over 3 years. Retail sales growth has remained buoyant, the A\$1.7 billion shortfall on the current account in July was the second largest on record, and consumer prices rose 7.1% and 7.3% year-on-year in the second and third quarters. These increases were above the 6.9% increase during the first quarter

AUSTRALIA: CHART 2 LIQUIDITY INDICATORS



and above market expectations. In short, the Reserve Bank's policy actions have to date been a failure.

The techniques of monetary control

The failure reflects a flaw in the central bank's techniques of monetary control (see AMM Vol. 11 No. 6). Australia's central bank does not exert control over the monetary base, but relies exclusively on attempting to influence credit demand via changes in short-term interest rates. The Reserve Bank stands ready to meet the banking system's demand for funds, but at rates of its own choosing. It effectively influences interest rates throughout the system via the official cash rates, which are the rates at which it provides accommodation through the medium of the official money market dealers. This system is closely modelled on the British system, where the Bank of England exercises control over money market conditions through changes in the official intervention rates on short-term instruments, via the medium of the discount houses.

In both countries there has also been a downgrading of the importance of the monetary aggregates in response to deregulation of the financial system which has made the aggregates difficult to interpret. In the UK the switch was made from the M3 aggregate to M0 - the wide monetary base - but through 1987 and the early part of 1988 the exchange rate, particularly against the Deutschmark, became the informal guiding principle on which changes in monetary policy were predicated. In Australia conditional projections for M3 were discontinued in January 1985. Although a checklist approach to monetary policy was later adopted, which involved monitoring a range of indicators to gauge the appropriate monetary stance, in practice the exchange rate has also been the dominant consideration.

However, the motivations for using the exchange rate as an informal guiding principle of monetary policy were radically different. In the case of the UK, the Chancellor's argument was that low inflation and stable growth could best be achieved by effectively inheriting German monetary policy, which could be relied upon to remain firm. In Australia it was undertaken to ensure the competitiveness of manufacturing industry. During 1987, when the exchange rate was under upward pressure, the authorities took fright that a rising real exchange rate would lead to the destruction of the wages accord by creating unemployment in the manufacturing sector. With the manufacturing sector already heavily shielded by a tariff wall which averaged 25%, capping the exchange rate had the effect of creating an additional subsidy by further cushioning industry from market forces.

The comparison between Australian and UK monetary control

If the motivations for adopting the exchange rate as the intermediate target variable of monetary policy differed, the effects were the same. The close resemblance of the Australian and British financial and institutional systems of monetary control is also mirrored in the cyclical imbalances which have emerged in their respective economies. In both countries domestic demand growth is outstripping that of output, notwithstanding tight fiscal policies which have resulted in balanced budgets (see Chart 4). In Australia the effect of preventing a real adjustment of the exchange rate to rising terms of trade was to

liquify the economy, effectively amplifying the effect of improving terms of trade. Commodity producers typically suffer from relatively short and violent business cycles and the Reserve Bank's attempt to mimic a fixed exchange rate system merely served to amplify this effect. In the UK the severity of the growing external imbalance is a response to central bank actions to cap the rise in the exchange rate above the DM3.00 level early this year, which liquified the economy and resulted in a sharp drop in interest rates. Domestic demand growth approached 8% in the first half of the year, more than twice the estimated productive potential of the economy.

Both Australia and the UK are therefore facing problems associated with past policy mistakes. Rapid demand growth in both countries reflects the result of the easy liquidity created earlier, and it is possible that the tighter monetary stances recently introduced in the two countries will soon choke off excessive demand growth. But this does not entirely explain why real short term interest rates, which have remained high in both countries for some years, have not been more effective in curbing private sector credit demand and excessive monetary growth. Both the UK and Australian techniques of monetary control, with their inherent reliance on the responsiveness of credit demand to changes in its cost, have been found wanting at critical junctures such as the present. Towards the later stages of the business cycle, when labour markets are tightening, real income growth is accelerating and inflationary pressures are rising, credit demand has proved relatively unresponsive to changes in interest rates. The cost of credit is less important than its availability against a backdrop of buoyant consumer and business confidence.

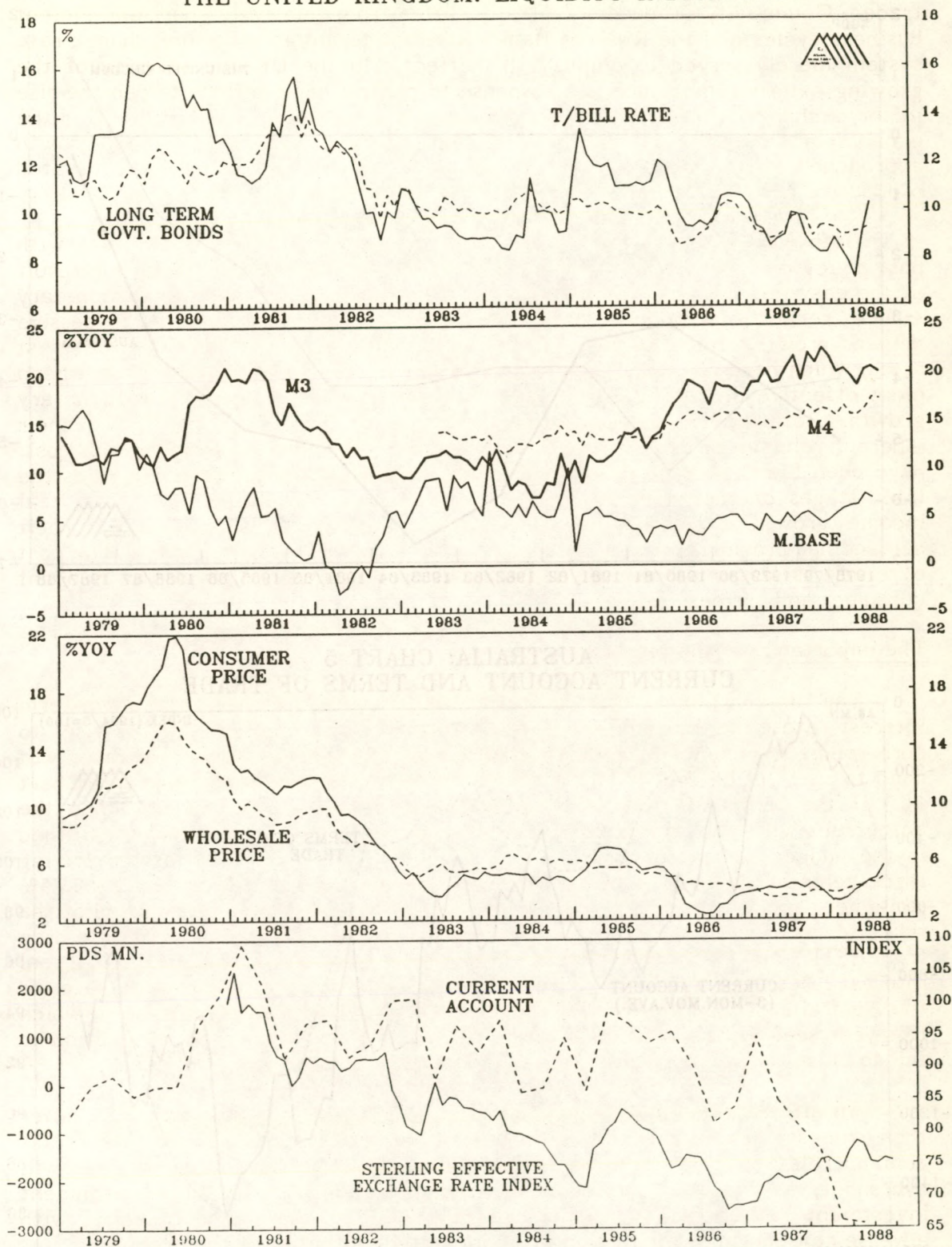
The importance of the terms of trade

The implication is that notwithstanding already high real short-term interest rates, the Australian authorities will need to engineer further rises to curb credit and domestic demand growth. By how much short-term rates will need to rise will be dependent on developments on the terms of trade (see Chart 5). If the terms of trade rise by 9% as projected in the budget, then the authorities will feel comfortable with their projections for the economy outlined in the budget, which continue to show domestic demand growth as the driving force behind growth. Total final domestic demand is forecast to rise by 3.75% while net exports are expected to fall by 0.5%. Because of the assumption of the rising terms of trade the current account deficit is nevertheless expected to drop from A\$11.9 billion to A\$9.5 billion. The size of this deficit, along with high real interest rates, should allow it to be comfortably financed at an exchange rate for the Australian dollar close to US 80 cents. Along with the wages accord, which this year seeks to limit nominal wage rises to 5%, this should allow inflation to fall to close to the 5% predicted by the Treasurer in mid 1989.

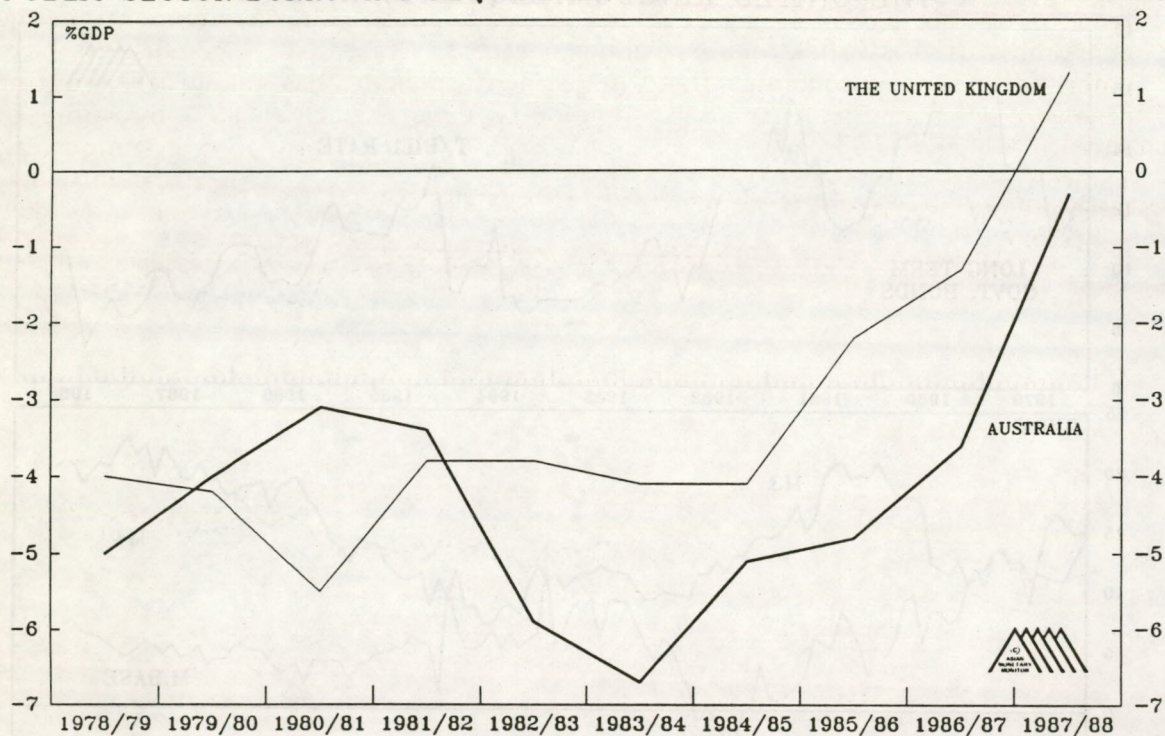
An alternative but less likely possibility is that if commodity prices falter then domestic demand growth will need to be further reined in. With credit demand relatively unresponsive to cost, the danger is that interest rates will overshoot, as monetary policy is tightened too much. In this environment investment rather than consumer spending will be the major casualty, with adverse consequences for the long-run productive potential of the economy.

The reason for rejecting this view is based on commodity price

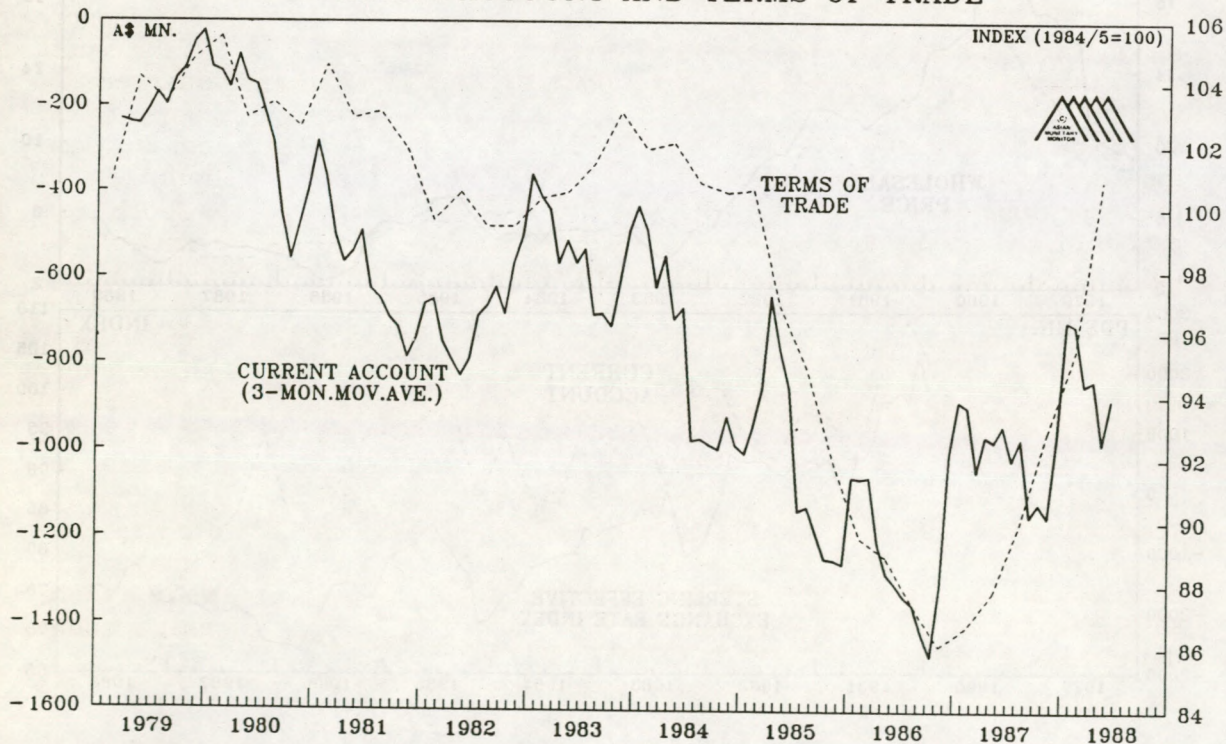
AUSTRALIA: CHART 3 THE UNITED KINGDOM: LIQUIDITY INDICATORS



AUSTRALIA: CHART 4
PUBLIC SECTOR BORROWING REQUIREMENT AS % OF GDP IN UK AND AUSTRALIA



AUSTRALIA: CHART 5
CURRENT ACCOUNT AND TERMS OF TRADE



expectations. Chart 6 shows that the steady improvement in Australia's terms of trade over the last year has been the result of late cycle developments in the economies of Australia's major trading partners. As capacity constraints have emerged in these economies fixed investment spending has taken off, creating renewed demand for Australia's commodity exports. Over 80% by value of Australia's exports consist of either processed or unprocessed commodities. Table 1 shows the composition of the Reserve Bank of Australia's commodity index with the weights mirroring the relative importance of each individual commodity in the country's export basket.

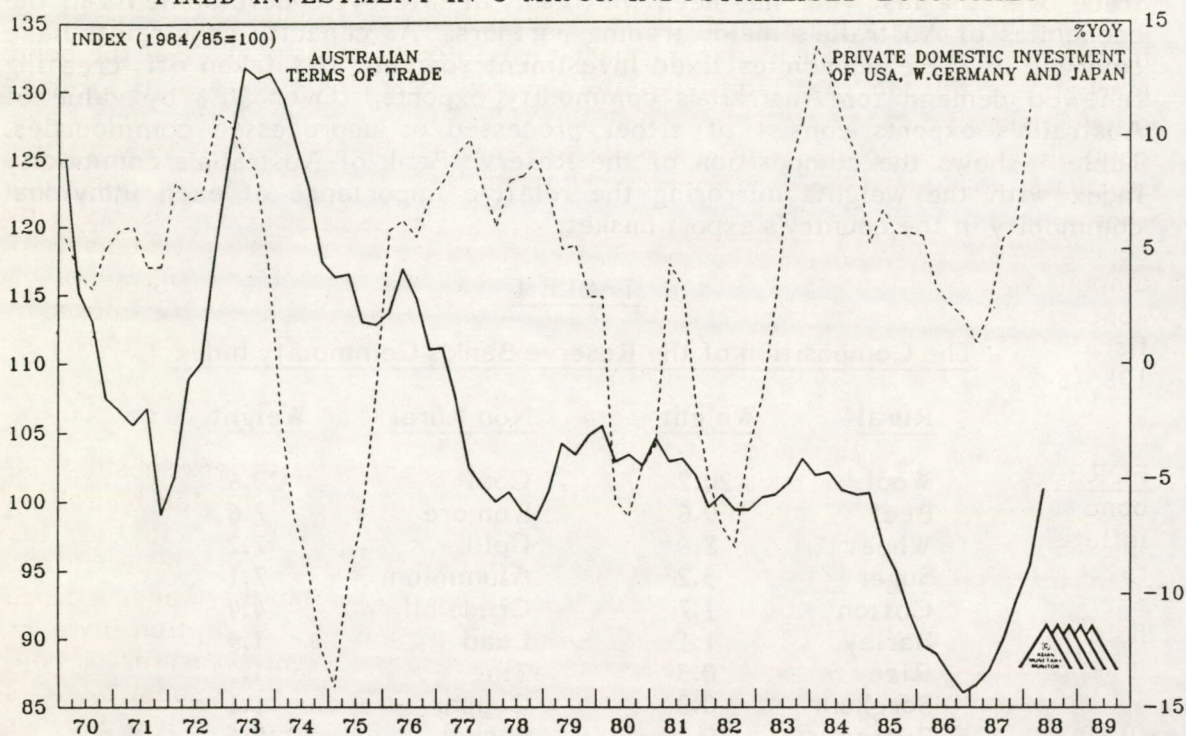
TABLE 1

The Composition of the Reserve Bank's Commodity Index

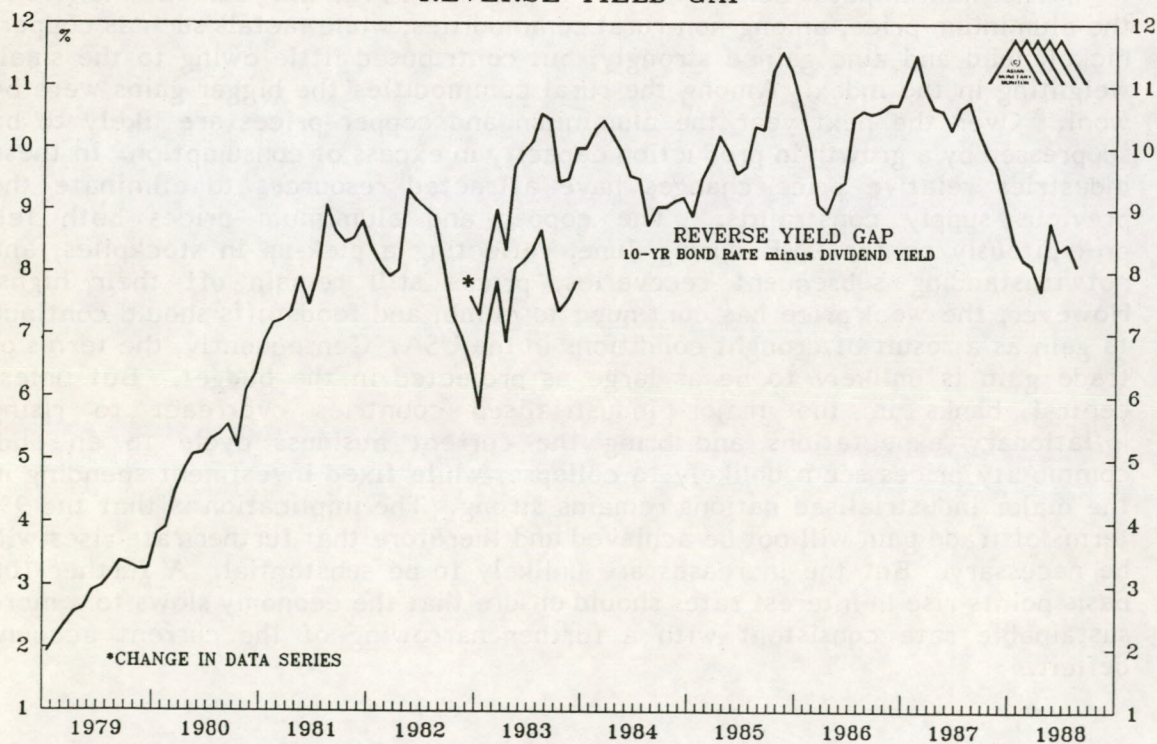
<u>Rural</u>	<u>Weight</u>	<u>Non Rural</u>	<u>Weight</u>
Wool	20.2	Coal	23.6
Beef	9.6	Iron ore	7.6
Wheat	8.6	Gold	7.2
Sugar	3.2	Aluminium	7.1
Cotton	1.7	Crude oil	4.4
Barley	1.1	Lead	1.9
Rice	0.3	Zinc	1.3
Sorghum	0.3	Copper	1.1
Butter	0.2	Nickel	0.6
Total	45.2		54.8

The main impetus behind the rise in the index over the year was the rise in the aluminium price, among non-rural commodities, while metals such as copper, nickel, lead and zinc gained strongly, but contributed little owing to the small weighting in the index. Among the rural commodities the bigger gains were by wool. Over the next year the aluminium and copper prices are likely to be suppressed by a growth in production capacity in excess of consumption. In these industries relative price changes have attracted resources to eliminate the previous supply constraints. The copper and aluminium prices both fell precipitously on the LME during June, reflecting a pick-up in stockpiles, and notwithstanding subsequent recoveries, prices still remain off their highs. However, the wool price has continued to climb, and foodstuffs should continue to gain as a result of drought conditions in the USA. Consequently, the terms of trade gain is unlikely to be as large as projected in the budget. But unless central banks in the major industrialised countries overreact to rising inflationary expectations and bring the current business cycle to an end, commodity prices seem unlikely to collapse, while fixed investment spending in the major industrialised nations remains strong. The implication is that the 9% terms of trade gain will not be achieved and therefore that further rate rises will be necessary. But the increases are unlikely to be substantial. A further 100 basis points rise in interest rates should ensure that the economy slows to a more sustainable rate consistent with a further narrowing of the current account deficit.

AUSTRALIA: CHART 6
 THE AUSTRALIAN TERMS OF TRADE VERSUS
 FIXED INVESTMENT IN 3 MAJOR INDUSTRIALISED ECONOMIES



AUSTRALIA: CHART 7
 REVERSE YIELD GAP



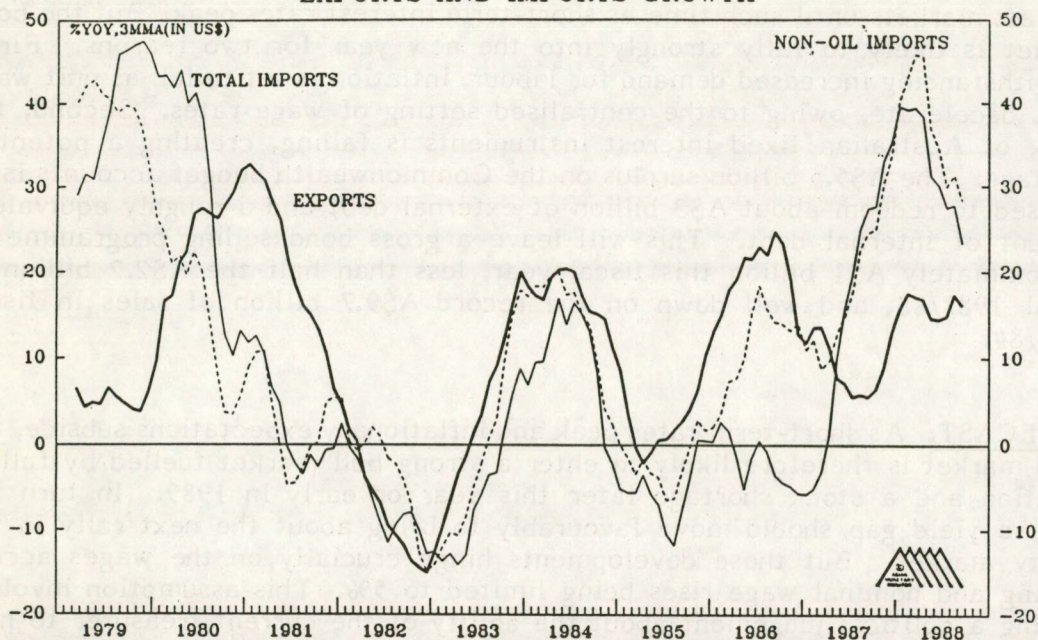
Impact on the equity and fixed interest markets

Rising short-term rates are unlikely to be positive for the equity and fixed interest markets until such time as short-term interest rates peak. But the bond market is likely to rally strongly into the new year for two reasons. First, notwithstanding increased demand for labour, inflation is set to fall as unit wage costs decelerate, owing to the centralised setting of wage rates. Second, the stock of Australian fixed interest instruments is falling, creating a potential shortage. The A\$5.5 billion surplus on the Commonwealth budget accounts is to be used to redeem about A\$3 billion of external debt and a roughly equivalent amount of internal debt. This will leave a gross bond selling programme of approximately A\$1 billion this fiscal year, less than half the A\$2.2 billion in fiscal 1987/88, and well down on the record A\$9.7 billion of sales in fiscal 1983/84.

FORECAST: As short-term rates peak and inflationary expectations subside, the bond market is therefore likely to enter a strong bull market fuelled by falling inflation and a stock shortage later this year or early in 1989. In turn the reverse yield gap should move favourably to bring about the next rally in the equity market. But these developments hinge crucially on the wages accord holding and nominal wage rises being limited to 5%. This assumption involves making a political judgement about the ability of the current treasurer to hold the current line and achieve a trade off between the promise of personal tax cuts in the next fiscal year and wages restraint in the current year. It also depends on the ability of monetary policy to slow domestic demand growth to a rate consistent with producing a further improvement in the current account deficit, irrespective of terms of trade developments. Monetary policy rather than fiscal policy will therefore be the crucial policy instrument over the next year.

JAPAN: THE WIDENING OF THE TRADE SURPLUS IS TEMPORARY

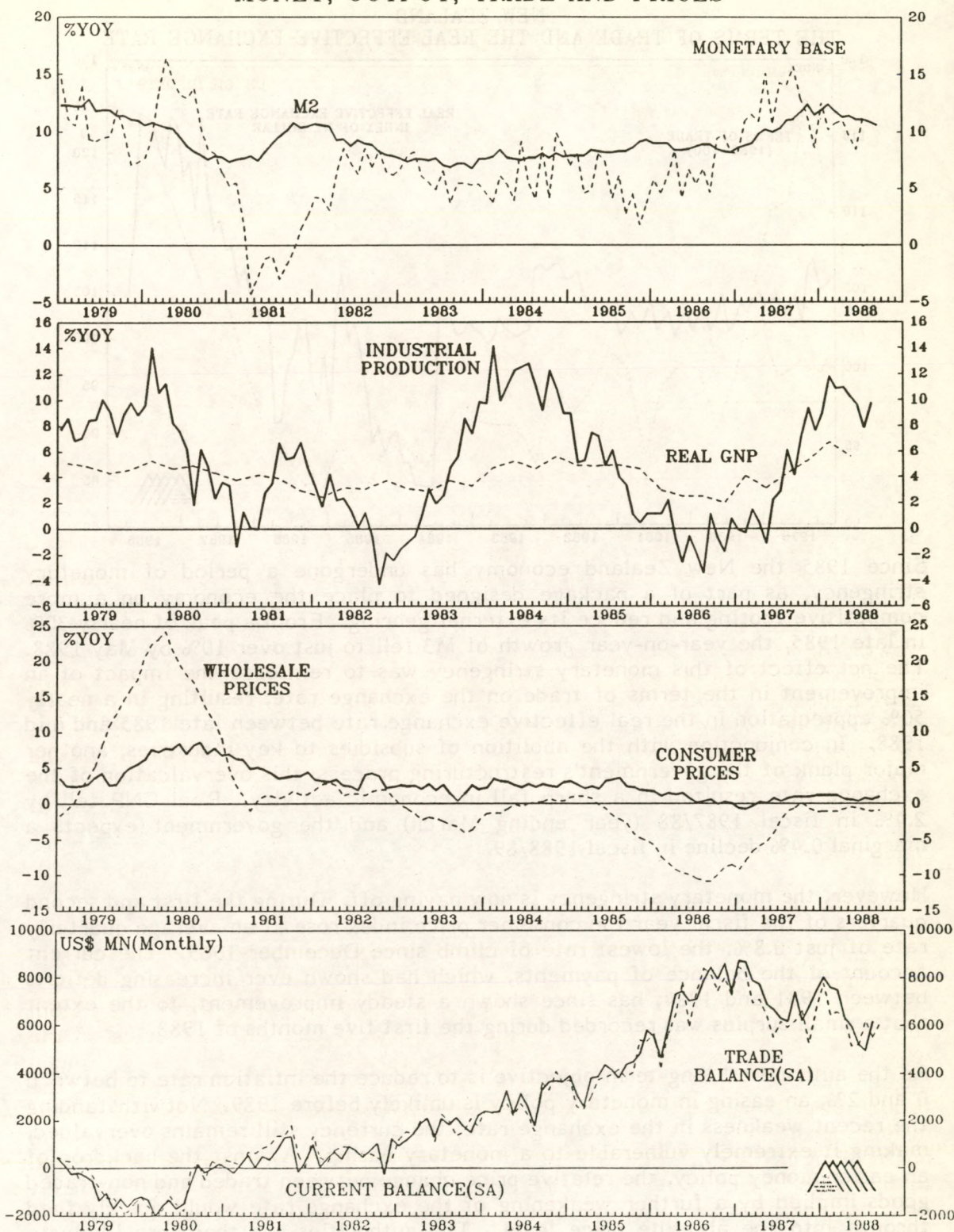
JAPAN
EXPORTS AND IMPORTS GROWTH



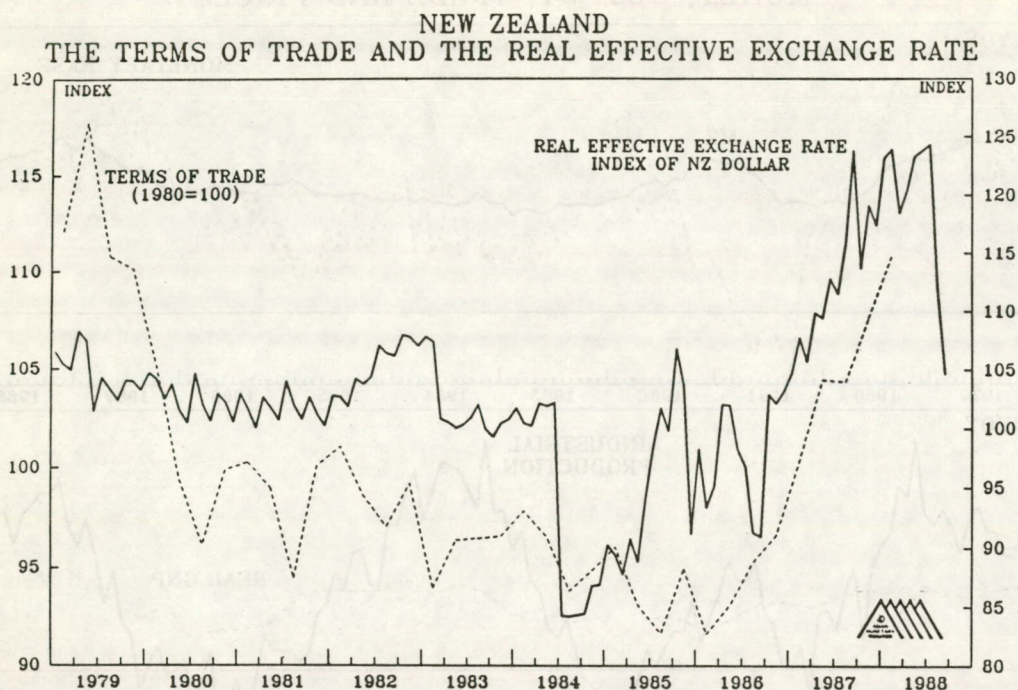
In recent months the Japanese trade surplus has shown signs of increasing. During the third quarter the trade surplus reached US\$22.6 billion, up from US\$20.7 billion in the previous quarter. This reflected a slowdown in import growth and some rise in export growth. While reduced oil imports and lower oil prices have played a role, the chart above shows that non-oil imports have slowed equally rapidly. This slowdown in import growth is primarily a lagged effect of the slower pace of economic activity during the second quarter, particularly of consumer spending. With money growth having slowed considerably this year - growth in M2 plus CDs has fallen from a peak of 12.4% in February to 10.6% in September - this is raising concern that the narrowing of the trade surplus which began in early 1987 is reversing, with worrying implications for the ability of the US to reduce its trade deficit.

However, while lower oil prices and the peaking out of commodity prices generally mean that nominal import growth is unlikely to maintain the momentum of early this year, in volume terms the trends in Japanese imports and exports should continue to allow the US trade deficit to improve. First, the slowdown in money growth is overstated owing to the flow of funds away from the city and regional banks to the trust banks and insurance companies in the wake of the abolition of Maruyu in April. Second, although the Bank of Japan edged towards a marginally tighter monetary stance from April to October, the falling oil price and the recent appreciation of the yen have since tilted the bias in the opposite direction. Inflationary expectations have subsided with the yield on the long bond falling from a peak of 5.6% this year to 4.6% in October and furthermore consumer spending recovered strongly during the third quarter. Thirdly, monetary conditions in the economies of Japan's major export markets have tightened since mid year. This increases the likelihood that domestic demand in these economies (US, Germany, the UK and the NICs) will weaken somewhat, leading to a lower rate of Japanese export growth through next year.

JAPAN MONEY, OUTPUT, TRADE AND PRICES



NEW ZEALAND: THE MONETARY TIGHTENING IS PAYING OFF

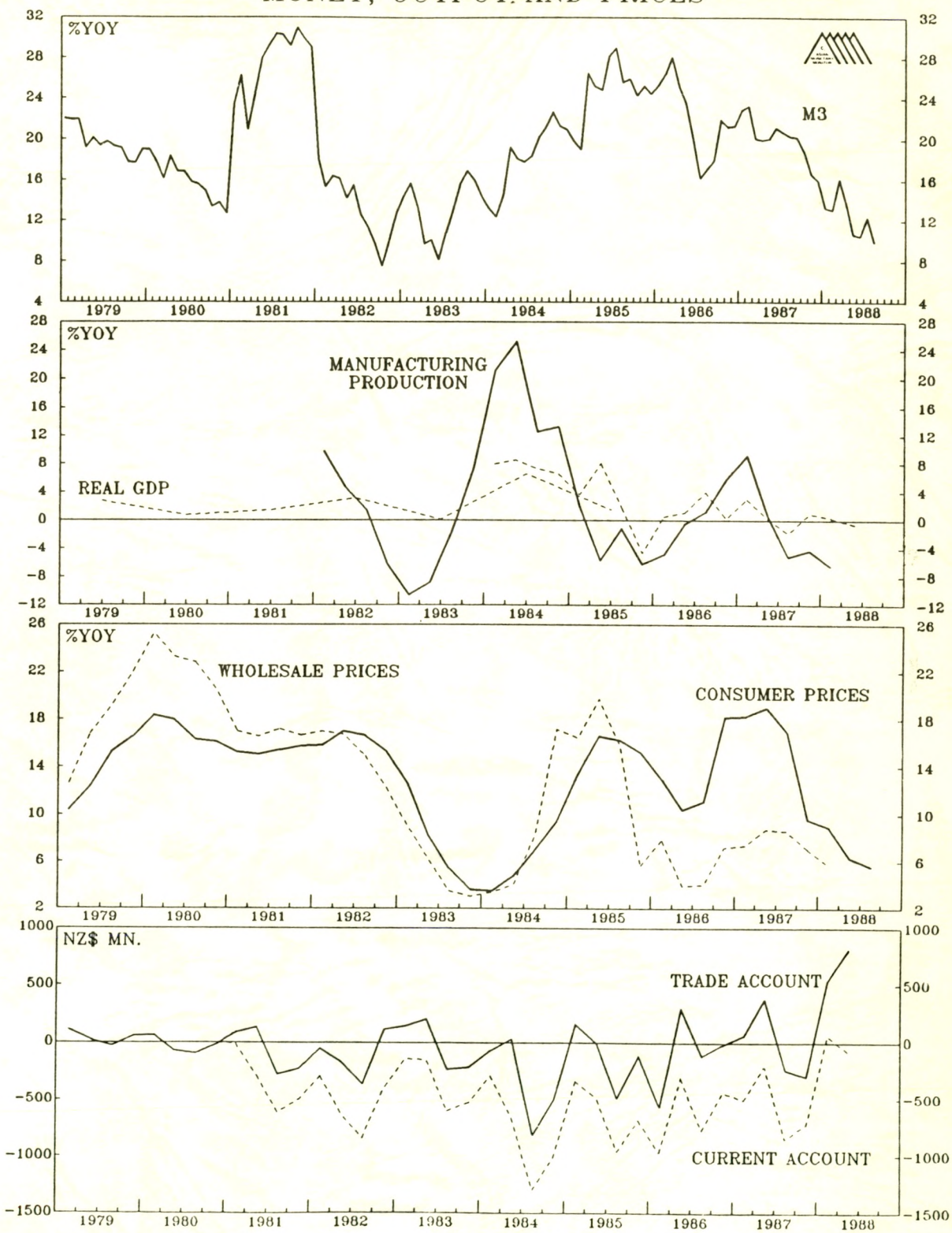


Since 1985 the New Zealand economy has undergone a period of monetary stringency, as part of a package designed to place the economy on a more competitive footing and reduce its external gearing. From a peak of nearly 30% in late 1985, the year-on-year growth of M3 fell to just over 10% by May 1988. The net effect of this monetary stringency was to reinforce the impact of an improvement in the terms of trade on the exchange rate, resulting in a nearly 50% appreciation in the real effective exchange rate between late 1985 and mid 1988. In conjunction with the abolition of subsidies to key industries, another major plank of the government's restructuring process, this overvaluation of the exchange rate resulted in a sharp fall in economic activity. Real GNP fell by 2.4% in fiscal 1987/88 (year ending March) and the government expects a marginal 0.4% decline in fiscal 1988/89.

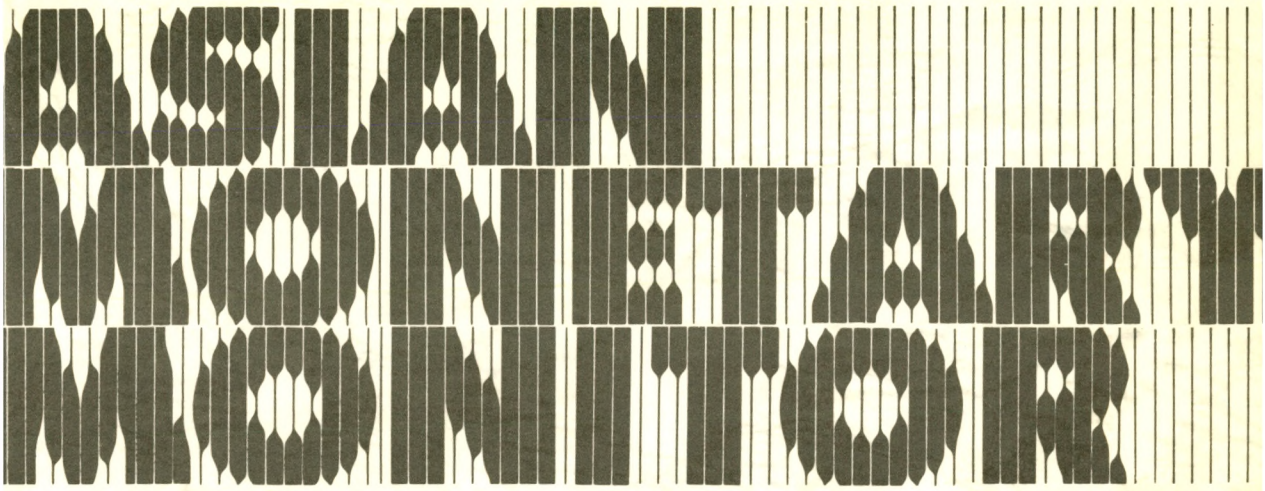
However, the monetary stringency is now paying off. During the first and second quarters of the fiscal year the consumer price index rose at an average quarterly rate of just 0.8%, the lowest rate of climb since December 1969. The current account of the balance of payments, which had shown ever increasing deficits between 1981 and 1984, has since shown a steady improvement, to the extent that a small surplus was recorded during the first five months of 1988.

As the authorities' long-term objective is to reduce the inflation rate to between 0 and 2%, an easing in monetary policy is unlikely before 1989. Notwithstanding the recent weakness in the exchange rate, the currency still remains overvalued, making it extremely vulnerable to a monetary easing. Against the backdrop of an easier money policy, the relative price change between traded and non-traded goods implied by a further weakening of the exchange rate would quickly feed through into the absolute price level. The authorities are therefore likely to allow speculative capital inflows into the NZ\$ to further unwind and the currency to return closer to its equilibrium level before easing.

NEW ZEALAND MONEY, OUTPUT AND PRICES







CONTENTS

	Page
HONG KONG:	
Intervention Replaces Arbitrage — The July Package of Monetary Measures: A Comment by Dr. Y.C. Jao	1
Response to Dr. Jao by John G. Greenwood	7
The Decline of Hong Kong Dollar in 1983: Devaluation or Depreciation? by Parth Shah	13
SINGAPORE:	
A Deliberate Tightening of Monetary Policy by Tim Lee	23
ECONOMIC CAPSULES:	
China: The Pendulum Swings Back Towards Central Control	JGG 34
Taiwan: Reduction in Central Bank Sterilisation Supports Continued High Money Growth	IPM 36
INDEX:	
An Index of AMM Articles Published in Volume 11	38
An Index of AMM Articles Published in Volume 12	40



John G. Greenwood
Publisher
Group Economist
G.T. Management PLC



Tim J. Lee
Editor
Economist
G.T. Management (Asia) Ltd.



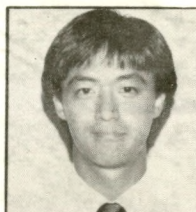
Ian P. MacFarlane
Economist
G.T. Management (Asia) Ltd.



Daniel L. Gressel
Economist
G.T. Management (Asia) Ltd.



Sook Yee Li
Statistician



Michael Wong
Graphics



Isabella Ling
Administration

© ASIAN MONETARY MONITOR LTD., HONG KONG 1988

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the editor.

Asian Monetary Monitor is a bimonthly publication specialising in the analysis of economies along the Asian Pacific Rim. Sold by subscription only, price US\$200 p.a. inclusive of air mail delivery to any part of the world. Correspondence and subscriptions should be addressed to the Editor, Asian Monetary Monitor Ltd., GPO Box 12964, Hong Kong.

ASIAN MONETARY MONITOR

November - December, 1988

Vol. 12 No.6

HONG KONG: INTERVENTION REPLACES ARBITRAGE — THE JULY PACKAGE OF MONETARY MEASURES: A COMMENT

Y.C. Jao

University of Hong Kong

Mr. John Greenwood in his article "Hong Kong: Intervention Replaces Arbitrage - The July Package of Monetary Measures" (AMM, July-August, 1988) takes a dim view of the "new accounting arrangements between the Exchange Fund and the Hongkong and Shanghai Banking Corporation" announced by the Hong Kong Government on July 15, 1988. While Mr. Greenwood presents an admirably lucid account of the Government's new measures, his conclusions, and some assumptions underlying his analysis, are open to question. The purpose of this note is to provide an alternative view in the hope of stimulating informed discussion and debate on the future development of Hong Kong's monetary system.

To facilitate our discussion, the gist of Mr. Greenwood's article may be stated as follows :

1. By creating accounts with the Exchange Fund for the Hongkong and Shanghai Banking Corporation (HSBC) and the Treasury, the Government is turning the Exchange Fund into a potential Central Bank;
2. These new accounting arrangements give excessive discretionary powers to the Government to regulate interest rates and money supply;
3. Given such discretionary powers, there is a danger that the Government's propensity to intervene in the markets will increase to such an extent that not only the arbitrage mechanism and the automatic adjustment mechanism will be completely overshadowed, but also that the 7.8 peg will become meaningless.

Let us examine these points one by one. Concerning the first point, Mr. Greenwood asserts that the new arrangements "constitute a major step towards the establishment of a central bank in Hong Kong", and to support this, he constructs simplified T-accounts that purport to show that the structure of the Exchange Fund's balance sheet is virtually identical to that of a typical Central Bank. This skeletal accounting approach is however not very convincing. Pending the full disclosure of the Exchange Fund's balance sheet by the authorities, one cannot determine for example the significance of individual items constituting the balance sheet. By the same token, one could just as well argue that the HSBC's balance sheet is structurally similar to that of a typical Central Bank. A more meaningful approach, in my view, is to examine what full-

fledged central banking entails in terms of the powers of monetary control and instruments of monetary policy. By general agreement, these include:

- (a) monopoly of the issue of legal tender notes;
- (b) minimum reserve requirements for all depository institutions and mandatory holding of such reserves at the Central Bank;
- (c) administration and control of the clearing system;
- (d) provision of "discount window" facilities and the determination of the discount rate;
- (e) open market operations in government debt on a daily basis (apart from interventions in the foreign exchange market and the inter-bank market);
- (f) selective credit controls.

From this list it can be readily seen that the July package affects only the clearing system by requiring the HSBC and the Treasury to keep separate clearing accounts with the Exchange Fund. Otherwise, the July package does not invest the Exchange Fund with any of the other central banking powers and instruments. Thus, note-issue remains in the hands of two commercial banks: there is no requirement that licensed banks and DTCs hold minimum reserves with the Exchange Fund; there is no "discount window" nor a posted discount rate; open market operations in government securities (which many economists, notably Milton Friedman, regard as the most powerful instrument of a Central Bank) are infeasible because of the virtual absence of tradable government debt; and last but not least, there is no credit control of any form. Even the reform of the clearing system is less than complete, for the HSBC retains its privilege as the Management Bank of the Clearing House. Thus seen in its proper perspective, it is hard to believe that the July package "constitutes a major step towards the establishment of a central bank in Hong Kong". This is quite apart from the fact that the Hong Kong Government has repeatedly rejected calls for a Central Bank or a Monetary Authority.

I have left out the important function of the "lender of last resort" because during 1983-87, the Exchange Fund spent most of its time and resources in bailing out insolvent banks and the futures market. Such a high profile was dictated no doubt by the extreme gravity of the banking crisis and the securities market crisis. However, even before 1983, it was widely understood that the Exchange Fund would stand behind the two note-issuing banks when they acted as surrogate lenders of last resort from time to time. Thus the July package adds nothing new as far as this function is concerned.

Turning to the second point about the Government's increased discretionary powers, Mr. Greenwood is correct in saying that, since the Exchange Fund is now the ultimate provider of liquidity in the inter-bank market, it can more effectively ensure the convergence of the market rate towards the official 7.8 rate. But Mr. Greenwood goes much further than this by claiming that the Government now can control interest rates and money supply. The analysis is

done under the heading "How the Exchange Fund Adjusts the Size of the Account". The example Mr. Greenwood gives is one where the Exchange Fund wishes to increase interbank liquidity and lower interest rates. According to Mr. Greenwood, there are four options available. The first is to purchase foreign exchange from the banking system. The second is to lend directly to the banking system. The third is to purchase commercial paper, CDs, and other money market instruments. The fourth is to shift funds from the Treasury's account with the Exchange Fund to the HSBC's account with the Exchange Fund. While the first and fourth options are certainly at the ready disposal of the Government, it is doubtful whether the second and third options are routinely available because of the absence of a discount window mentioned earlier. However, in order to meet Mr. Greenwood on his own ground, let us grant that these options are regularly exercised. Mr. Greenwood then asserts :

"All of these transactions are precisely comparable to the actions of a central bank which wishes to expand the money supply. In Hong Kong's institutional setting the initial result is a lowering of interest rates which will in turn prompt the banks to increase their loans which in turn will result in an increase of money supply" (*ibid.*, p. 10).

This scenario appears plausible, but is seriously incomplete. For what the author has discussed is only the initial effect, or partial equilibrium effect, but not the final effect, or general equilibrium effect. Take the case of buying foreign exchange. In order for it to have any significant effect, the Government must keep on buying on a substantial scale. The pertinent question which one might ask is: where does the foreign exchange come from? The banking system does not have a widow's cruse of foreign exchange. In the last analysis, such foreign exchange must be generated by a favourable balance of payments. But suppose that for time being, the banking system does have sufficient foreign exchange to sell. The initial effect will indeed be an increase in money supply. However, wages and prices will then also rise in due course, causing a deterioration of Hong Kong's external competitiveness, which in turn will lead to a loss of foreign exchange reserves. Given a relatively stable currency to money stock ratio, money supply will have to shrink, until wages and prices fall to restore Hong Kong's competitiveness again. This adjustment mechanism must work as long as the two fundamental features of the present linked system remain in force, namely, the full backing of the note-issue by US dollars, and the full convertibility of the Hong Kong dollar at the fixed rate of 7.8. Now nothing in the July package suggests that this is not the case. The same reasoning applies, a fortiori, to the cases where the second and third options are pursued. In other words, what ultimately determines Hong Kong's money supply is the balance of payments, not the Government's discretionary monetary policy. Indeed, for a small open economy whose currency is tied to that of a major power, there is no independent monetary policy to speak of. Thus Mr. Greenwood's statement that "the new arrangements introduce an element of discretion which will enable the authorities to move the money supply up or down as they choose" is a non sequitur.

How about the case of shifting funds from the Treasury account? In principle, our general equilibrium analysis applies as well. But there is an added consideration. In most countries (notably US and UK), government deposits are not counted as part of money supply, on the grounds that the Government's

power to spend is not constrained by its bank balances. This rationale is generally accepted by monetary economists. In Hong Kong, however, government deposits of more than 7 days are included in the definitions of money supply. If Hong Kong follows the more correct methodology, the Treasury account will be devoid of monetary significance.

As regards the third point about the 7.8 peg, having satisfied himself that "Hong Kong's monetary system no longer depends on an automatic adjustment mechanism but will rely ultimately upon the intervention of the authorities", Mr. Greenwood then asserts that "there is no need to insist that the foreign exchange rate for the Hong Kong dollar remains at 7.8... Now that the Government has the means to enforce any rate that it chooses, the basis for sticking with 7.8 has been eroded". This is an example of "implicit theorizing" - theorizing on the basis of implicit but questionable assumptions. As already pointed, the July package does not affect in any way the fundamental characteristics of the existing linked exchange rate system, namely, the full backing of the note-issue by US dollars, and the full convertibility of the Hong Kong dollar at 7.8. It follows that the automatic adjustment mechanism and the arbitrage process also remain operative. But the linked rate system never implied that the 7.8 rate cannot be changed. At the time the system was established in October 1983, the then Financial Secretary publicly declared that the rate could be changed, though only in the direction of upward revaluation of the Hong Kong dollar. The simple fact is that, since October 15, 1983 it has always been the case that the Government exogenously determines the HK\$/US\$ exchange rate, to which interest rates and money supply endogenously adjust. The July package neither increases nor decreases the Government's power to fix an exchange rate other than 7.8. What has prevented the Government from changing the peg during the past five years is not any legal or constitutional constraint, but the fearful prospect of unpredictable consequences.

Mr. Greenwood's speculative remarks on exchange rate targeting and interest rate targeting (pp. 11-12) are further instances of "implicit theorizing", the implicit assumption being that the Exchange Fund is already a de facto Central Bank and therefore eager to use its new instruments. He seems to suggest that the July package somehow represents a return to the Bretton Woods system. He does not seem to realize that the fact that the Government has new instruments does not necessarily imply that it is obligated to use them. He is content to assert that intervention replaces arbitrage, but does not offer credible evidence; nor does he explore the possibility that Government intervention can assist market arbitrage.

While Mr. Greenwood exaggerates, in my view, the central banking implications of the July package, and the Government's interventionist capability and propensity, he plays down however the significance of one aspect of the package, namely the removal of one of HSBC's special privileges. There is a perfunctory passage about it, but the whole question merits more discussion. In almost all other market economies, there is strict segregation of central banking from commercial banking; the Central Bank is not supposed to engage in profit-making activities in competition with other commercial banks, and by the same token, no profit-making commercial bank is given quasi-Central Bank status. The underlying rationale is, of course, the prevention of conflict of interest and the over-concentration of power. In Hong Kong, however, the two are

commingled such that the HSBC, the largest profit-making commercial bank, also doubles as a quasi-Central Bank. The inherent conflict of interest has long been the subject of adverse comments by impartial observers of Hong Kong's monetary and banking system and practising bankers. One manifestation of this conflict of interest is the HSBC's role as the Management Bank of the Clearing House. Before July 15, 1988, all licensed banks in effect had to keep clearing accounts with the HSBC. The HSBC charged interest on the debit balances of the other banks, but paid nothing on their credit balances. By requiring the HSBC itself to keep a clearing account with the Exchange Fund, the July package has transferred a substantial portion but not the whole of the monopoly profits from managing the Clearing House to the Exchange Fund. To see this, let us use a numerical example (the figures are purely hypothetical). Suppose that on a given day, the Bank of China group has a credit balance of \$ 50 million, the foreign banks as a group have a debit balance of \$ 60 million, and the local banks as a group have a debit balance of \$ 30 million. Under the July package, the HSBC now has to pay interest on the net clearing balance (NCB), \$ 40 million, to the Exchange Fund. But since the HSBC continues to be the Management Bank, even after July 15, 1988, it still collects interest on the gross debit balance of \$ 90 million, but pays nothing on the credit balance of \$ 50 million. Thus, the HSBC's monopoly profit is reduced, but by no means eliminated. It might be claimed that the debit balance represents "borrowing" from the HSBC, hence the latter is justified in charging interest thereon. But if the debit can be construed as "borrowing", then it must be a very involuntary "borrowing" indeed. For such debits frequently occur due to factors beyond the other banks' control (e.g. a large public subscription to a new share issue). Moreover, whereas the costs of running the Clearing House are shared by all member banks, the interest income accrues only to the HSBC. Sometimes it has been suggested that if other banks resent this arrangement, they should opt out of it. The simple answer to this is that the rules of the Clearing House expressly forbid member banks to organize or join any alternative clearing arrangement. Ostensibly, the Management Bank is appointed by the Hong Kong Association of Banks (HKAB). But the HKAB is dominated by the HSBC, which is one of its two statutory Chairmen. Membership in the HKAB is compulsory under the 1981 Ordinance. Thus, even if the other banks do not wish to keep idle credit balances or incur debit balances with the HSBC there is absolutely nothing they can do. A second complaint relates to the fact that, by virtue of its being the Management Bank of the Clearing House, the HSBC has access to confidential and sensitive information about the daily cash-flow of virtually all other banks. This is not to suggest that the HSBC has in fact abused its privilege, but the other banks do have a valid grievance in that, as a matter of principle, no financial institution should enjoy any access to confidential information about its competitors. Since the HSBC continues to be the Management Bank of the Clearing House, the "information access" problem remains unresolved.

As indicated in the preceding paragraphs, I have quite a number of reservations on Mr. Greenwood's article. But like him, I am against the creation of a formal Central Bank, though not necessarily for the same reasons. However, to be logically consistent, one should also oppose the granting of a quasi-Central Bank status on any commercial bank. I am also aware of the dangers of giving too much discretionary power to the Government. I would be very worried, for example, if the 100% US dollar backing of the note-issue, and full convertibility of the Hong Kong dollar, were abolished or tampered with.

But nothing in the July package indicates that this is the case. I therefore feel that Mr. Greenwood has read into the July package more than can be logically or empirically justified.

To conclude, the alternative view presented in this note can be summarized as follows :

1. The July 1988 package of monetary measures strengthens the hand of the Government in the inter-bank market, and makes it easier for the Government to move the market rate towards the official rate of 7.8.
2. The July package does not entail the creation, imminent or otherwise, of a formal Central Bank.
3. Since the 100% US dollar backing of the note-issue and the full convertibility of the Hong Kong dollar are unaffected by the July package, the automatic adjustment mechanism and the arbitrage mechanism remain operative. In the final analysis, Hong Kong's money supply is determined by the balance of payments: the government cannot exert more than a transitory influence on money supply. It follows that the general proposition that a small open economy whose currency is tied to that of a major country cannot have an independent and discretionary monetary policy (money stock control policy) in any but the trivial sense, still holds.
4. The July package neither increases nor decreases the Government's power to change the HK\$/US\$ exchange rate. Any decision to change or not to change the peg is governed by a host of economic and non-economic considerations, but not by any legal or constitutional constraint.
5. The July package partially, but not wholly, resolves the conflict of interest inherent in an arrangement whereby a profit-making commercial bank is also given quasi-Central Bank status.
6. There is no presumption that the July package must result in the replacement of arbitrage by intervention. The Government can, and should, use its new instruments to assist, or complement, the market arbitrage process.

HONG KONG: RESPONSE TO DR. JAO

John G. Greenwood

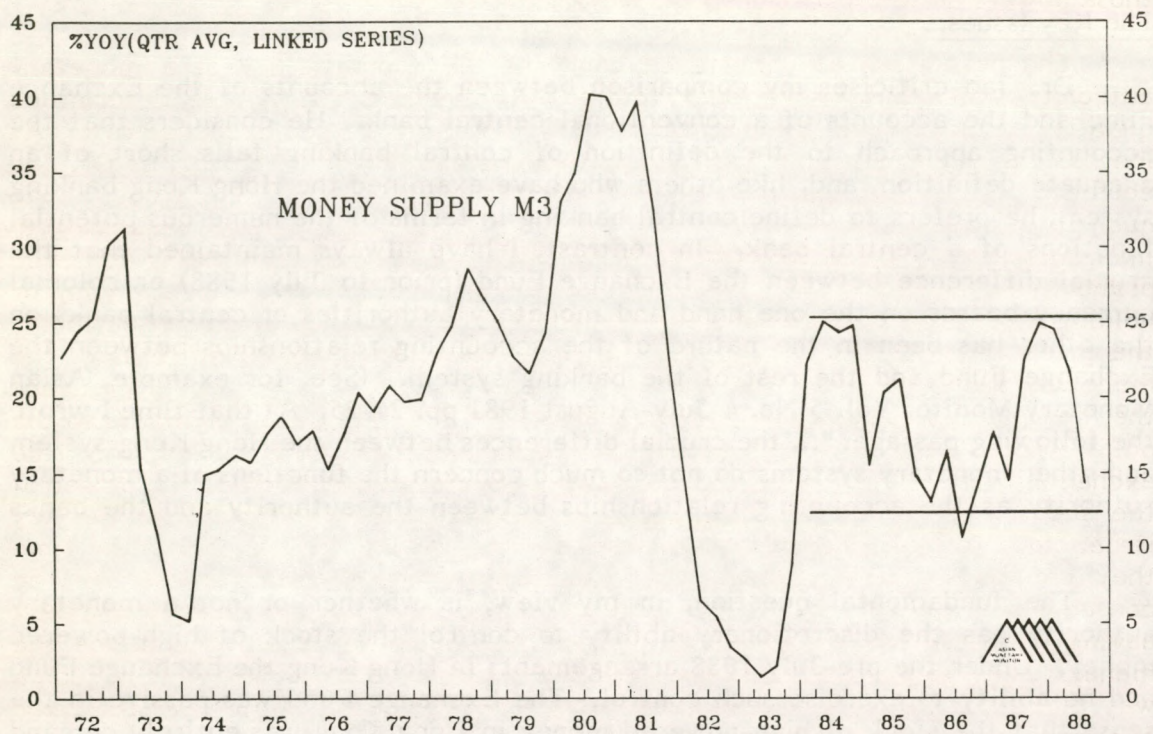
The Key Issues.

Dr. Jao criticises my comparison between the accounts of the Exchange Fund and the accounts of a conventional central bank. He considers that the accounting approach to the definition of central banking falls short of an adequate definition, and, like others who have examined the Hong Kong banking system, he prefers to define central banking in terms of the numerous potential functions of a central bank. In contrast, I have always maintained that the crucial difference between the Exchange Fund (prior to July 1988) or colonial currency boards on the one hand and monetary authorities or central banks on the other has been in the nature of the accounting relationships between the Exchange Fund and the rest of the banking system. (See, for example, Asian Monetary Monitor Vol. 5 No. 4 July-August 1981 pp. 24-25. At that time I wrote the following passage: "... the crucial differences between the Hong Kong system and other monetary systems do not so much concern the functions of a monetary authority as the accounting relationships between the authority and the banks").

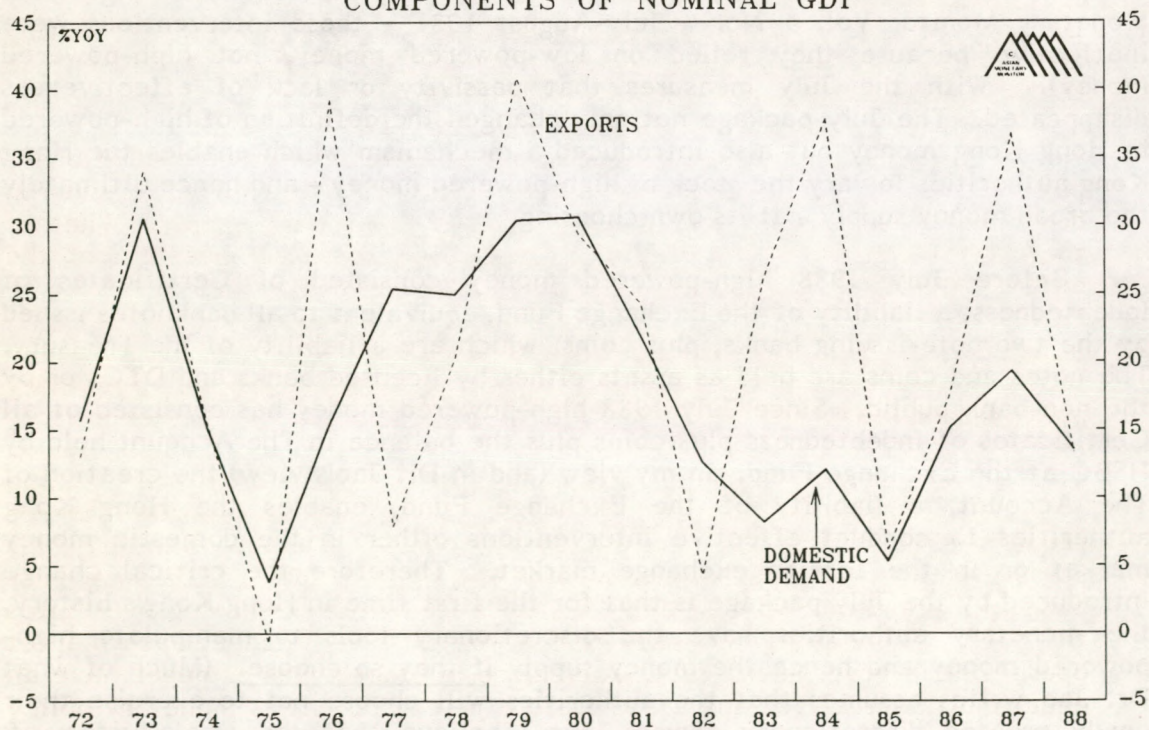
The fundamental question, in my view, is whether or not a monetary authority has the discretionary ability to control the stock of high-powered money. Under the pre-July 1988 arrangements in Hong Kong the Exchange Fund had no ability to exercise such control. The Exchange Fund was passive in the sense that the stock of high-powered money in Hong Kong was entirely demand determined. That in turn meant that, under a fixed exchange rate regime, the money supply was demand-determined. (It is true that the Exchange Fund intervened from time to time in the foreign exchange market, and occasionally in the domestic money market, but as I have demonstrated elsewhere - e.g. Asian Monetary Monitor Vol. 5 No. 4 July-August 1981 - those interventions were ineffective because they relied on low-powered money, not high-powered money). With the July measures that passivity or lack of effectiveness disappeared. The July package not only changed the definition of high-powered in Hong Kong money but also introduced a mechanism which enables the Hong Kong authorities to vary the stock of high-powered money - and hence ultimately the broad money supply - at its own choosing.

Before July 1988 high-powered money consisted of Certificates of Indebtedness, a liability of the Exchange Fund, equivalent to all banknotes issued by the two note-issuing banks, plus coins, which are a liability of the Treasury. The notes and coins are held as assets either by licensed banks and DTCs or by the non-bank public. Since July 1988 high-powered money has consisted of all Certificates of Indebtedness plus coins plus the balance in The Account held by HSBC at the Exchange Fund. In my view (and in Dr. Jao's view) the creation of The Account, a liability of the Exchange Fund, enables the Hong Kong authorities to conduct effective interventions either in the domestic money market or in the foreign exchange market. Therefore the critical change introduced by the July package is that for the first time in Hong Kong's history, the monetary authorities have the discretionary tools to manipulate high-powered money and hence the money supply if they so choose. (Much of what Dr. Jao writes assumes that the authorities will choose not to exercise their newly created discretionary powers, but I believe that the whole history of

HONG KONG THE LINKED RATE SYSTEM HAS ENHANCED MONETARY STABILITY



HONG KONG COMPONENTS OF NOMINAL GDP



central banking suggests otherwise. To date (Dec. 1988) they have chosen to use those powers on four occasions.)

The next issue of importance concerns the compatibility of a monetary authority which has discretionary powers and hence a supply-side determined quantity of money with the maintenance of Hong Kong's fixed exchange rate. As long as the Exchange Fund was passive the balance of payments was, as Dr. Jao correctly points out, the key to monetary equilibrium in Hong Kong. The quantity of money would adjust over time to whatever level was necessary to maintain equilibrium in the balance of payments, that adjustment being achieved primarily by demand side adjustments i.e. through the private sector spending or holding more or less money in relation to income, and hence ultimately altering the price level in Hong Kong. However, under the new post-July regime, the monetary authorities can now choose - if they so wish - to expand or contract the money supply in Hong Kong independently of the balance of payments to the point where it is no longer compatible with the fixed HK\$ 7.80 = US\$ 1.00 exchange rate. Therefore in my view Dr. Jao's whole discussion of the power of the authorities to set the exchange rate does not really grapple with the key issue. In a formal sense the authorities can change the official parity any time they choose - irrespective of past commitments. Naturally there will be consequences which would affect their decision. But the key issue is whether, having acquired the capability to control high-powered money and hence the money supply in the short run, the authorities will be able to manage it in such a way that the quantity of money is consistent with the demand for it at the fixed exchange rate in the long run.

Minor Points

1. Dr. Jao writes in summary of my article: "2. These new accounting arrangements give excessive discretionary powers to the Government to regulate interest rates and money supply." (My emphasis).

No, the new accounting arrangements give the Government discretionary powers which they never previously had in relation to short-run determination of money market conditions or the money supply. Whether the powers are excessive or not is in part an empirical question of the extent to which they are used.

2. In Dr. Jao's 6-point summary of "what full-fledged central banking entails in terms of the powers of monetary control and instruments of monetary policy," he lists "(b) minimum reserve requirements for all depository institutions and mandatory holding of such reserves at the Central Bank". This is an overstatement of practice in a number of central banking systems. There is no need for a central bank to impose reserve requirements in order for it to maintain monetary control. Similarly, his statement that "(e) open market operations in government debt on a daily basis...." are a normal function of full-fledged central banking overstates the case. There is no necessity that a central bank conduct open market operations in government debt. Operations in other types of paper have an equal multiplier effect and are therefore just as potent as monetary policy instruments. (See M. Friedman and A. Schwartz, "A Monetary History of

the United States, 1867-1960" especially pp. 266-267, Bills Versus Government Securities, and "A Monetary Authority with No Government Debt" in Asian Monetary Monitor, July-August 1981 p. 31).

3. Partial versus General Equilibrium Effects.

Since the July measures government (i.e. Exchange Fund) purchases (or sales) of foreign exchange via The Account have a multiplier - and therefore a substantial - effect, even for relatively modest purchases (or sales). Dr. Jao's question: "Where does the foreign exchange come from?" is not pertinent in today's world of global multi-currency banking and Euro-currency markets. The government can always buy (or sell) foreign currency via The Account. Of course there will be monetary consequences. What is pertinent is how far, given the constraints of convertibility at the fixed 7.80 parity, and full backing of the note-issue by US dollars, the authorities will intervene. Assuming the authorities are determined to keep the HK dollar parity at 7.80, there is no doubt (as I wrote in Asian Monetary Monitor July-August 1988) that they can keep the free market rate close to that level with the aid of their new instruments. But suppose they pursue some other target, such as keeping interest rates in Hong Kong at some specific level, how can one be sure that the quantity of money in Hong Kong will remain consistent with the 7.80 parity? Intervention in pursuit of a goal other than maintaining the fixed parity carries with it the possibility of a government-engineered divergence between the equilibrium money stock and the 7.80 exchange rate parity. In the past these divergences would have been solved by private sector arbitrage and other consequences of the automatic adjustment mechanism, whereas now such a divergence can be unwittingly prolonged and extended by continued governmental intervention.

The difference between Dr. Jao and myself on this point boils down to one of timescale. Both Dr. Jao and I would agree that there are now multiple expansion or contraction effects from Exchange Fund operations on The Account. He stresses the long term general equilibrium consequences i.e. that adherence to the 7.80 parity ultimately implies that the money supply cannot long diverge from its equilibrium level and must eventually return to it. My emphasis is on the (novel) possibility of short term, officially generated divergences from that long run equilibrium, and the risk that those divergences may be unwittingly exacerbated by the pursuit of new goals (such as interest rate targets) which in the pre-July 1988 regime were not attainable because the necessary instruments did not exist.

4. Implicit Theorizing or Exploring Logical Consequences?

If the new powers enable the government to fine-tune the free market exchange rate, then it follows that the authorities could, theoretically and practically, make the free market rate whatever they choose to make it. If this is combined with official announcement(s) of a new parity, there would seem to be no reason why the authorities could not de facto move to a basket system for pegging the Hong Kong dollar.

This is quite different to the situation prior to July 1988. Before that date

the ineffectiveness of official intervention meant that deviations of the free market rate from the parity could only be closed by cash arbitrage or by interest rate arbitrage. If the government is going to close the gap between the free market exchange rate and the 7.8 fixed parity by regular intervention, then the opportunities for profitable cash arbitrage will evaporate. Similarly if the government also attempts to maintain rough parity between HK\$ interest rates and US\$ interest rates by intervention, then the opportunities for interest rate arbitrage will also diminish.

5. Exchange Rate Targeting and Interest Rate Targeting.

Given the new machinery it seemed appropriate to explore how it might operate in certain circumstances. Again, this was a legitimate exercise in exploring certain possible implications of the new system. My article made it quite plain that I thought that in practice the new machinery would work very efficiently to keep the free market exchange rate near to the official parity.

As to the suggestion that intervention can assist arbitrage, this depends on the opportunity for profit that is left open to the private sector. In my view, under the new arrangements cash and interest rate arbitrage will occur less frequently rather than more frequently precisely because the government is now reducing the margins of deviation which previously created the opportunities for profit. Therefore in Point 3 of Dr. Jao's conclusion it is not entirely accurate to state that the arbitrage mechanism remains operative. It may do so, or part of it may do so, but that depends how the new arrangements are used. Similar observations apply to his Point 6.

6. The Role of the Hong Kong Bank and the Removal of its Special Privileges.

I am largely in agreement with everything Dr. Jao writes in this area. It would certainly have been desirable to have devoted more space in my article to this aspect of the July package. Like him I agree that there is an inherent conflict in the granting of quasi-central banking powers to any commercial bank.

Conclusion.

The key issue is automaticity versus discretion. Since the linked rate system was established there has always been a choice between moving to a system with less intervention or more automaticity and moving to a system which entails more discretion. I have always favoured moves in favour of making the system more automatic. This has been the theme underlying my various proposals for

- (1) opening up the cash arbitrage at 7.80 to individuals as well as to banks (See AMM Vol. 8 No. 6, November-December 1984 pp 3-5);
- (2) abolition of the Interest Rate Agreement of the Hong Kong Association of Banks (AMM Vol. 8 No. 6, November-December 1984 pp 8-9);

- (3) allowing for cash settlement at the Clearing House (AMM Vol. 12 No. 1, January-February 1988 pp 6-9), and
- (4) allowing banks to settle in US\$ with the Clearing House (AMM Vol. 12 No. 1, January-February 1988 p. 9).

These proposals would all have the effect of increasing the opportunities for arbitrage, thus reducing any deviations between the free market exchange rate and the official parity for the Hong Kong dollar. None of them involve discretionary actions by the authorities, and therefore all of them have the merit of keeping the government out of the market on a day to day basis. By contrast, official reactions to defects in the mechanism or actual deviations of the free market exchange rate from the official parity have all been in the opposite direction, in favour of increased interventionism or greater use of official discretion. For example, since the establishment of the system in October 1983 the authorities have :

- (1) intervened in the foreign exchange market (prior to July 1988) in a way which, though profitable in a financial sense, was not effective in the monetary sense of having a multiple expansion or multiple contraction effect on money or credit creation in the banking system;
- (2) proposed and created the framework for (but not implemented) a cumbersome negative interest rate scheme to deter speculation on an upward revaluation of the Hong Kong currency, and
- (3) introduced two new liability items on the balance sheet of the Exchange Fund which enable the authorities to adjust the quantity of high-powered money at their discretion.

Dr. Jao appears to argue in favour of discretionary intervention provided that it supports or reinforces the existing fixed parity for the Hong Kong dollar. My viewpoint is that the creation of such mechanisms puts Hong Kong's monetary system on the slippery slope towards central banking. As official confidence in the use of such mechanisms grows, there will be an increasing tendency to introduce other reforms which move Hong Kong closer to a central banking system. When economists look back at the history of these changes, I believe the July package of 1988 will prove to have been a major step along the way towards the creation of a central bank of Hong Kong.

HONG KONG: THE DECLINE OF THE HONG KONG DOLLAR IN 1983: DEVALUATION OR DEPRECIATION?

Parth Shah

Auburn University

The economy of Hong Kong suffered two major shocks in the early 1980s: the collapse of the stock and the property markets in 1982, and the dramatic fall of the Hong Kong dollar in 1983. There is a general agreement among Hong Kong economists on the principal cause of these shocks. They were primarily due to the uncertainty regarding the colony's future after 1997. The Sino-British talks had been initiated in the middle of 1982, but soon fell into an on-again, off-again diplomatic battle, generating uncertainty and anxiety.

But according to some U.S. economists, David T. Beers, Thomas J. Sargent, and Neil Wallace (1983) of the Rational Expectations School, the reasoning of the Hong Kong economists is fallacious. (Note 1) They contend that only the collapse of the stock and property markets, but not that of the Hong Kong dollar, can be attributed to the unfavourable speculation about 1997. Beers, Sargent, and Wallace (henceforth, BSW) argue that the government of Hong Kong "departed from its official policy (of free float) in order to promote the depreciation of the Hong Kong dollar" (p. 14). (Note 2) Thus, according to BSW, the decline of the Hong Kong dollar, was not a depreciation (a market action) but a devaluation (a government action). The explanation for the fall of the Hong Kong dollar put forth by BSW (devaluation) is diametrically opposite to the one accepted by Hong Kong economists (depreciation).

The purpose of this note is to assess the arguments of BSW supporting their case for devaluation of the Hong Kong dollar in 1983. One must note that during the time period with which we are concerned in this note, November 1974 to October 1983, Hong Kong had a unique monetary regime. "Positive non-intervention" was the official policy in all areas including money. This meant that in Hong Kong, where currency is supplied by private banks, the quantity as well as the price (foreign exchange value) of money were determined by market forces. (Note 3) In the following, I shall first summarise the arguments of BSW and then present my appraisal of them.

The Case for Devaluation

In order to make the summary of BSW's arguments brief and pertinent, let us first ask: What is logically required to build the case for a government engineered devaluation of the Hong Kong dollar? Three points, it seems, are necessary to make such a case. First, BSW must be able to show that there are two distinct sets of factors governing the value of assets and the foreign exchange value of money. That is, the kind of expectations that affect the value of assets would not affect the exchange value of money. The adverse expectations about 1997, therefore, could reduce the present value of real estate and stocks, but could not change the foreign exchange value of money.

Secondly, BSW should demonstrate that the Hong Kong government was capable of bringing about a devaluation; and thirdly, they should articulate the incentives for the government to devalue the Hong Kong dollar. Let us consider how BSW fulfill these three logical requirements in reverse order.

Incentives for Devaluation

BSW point out that there were two primary benefits to the government in devaluing the Hong Kong dollar. First, since "the Exchange Fund's portfolio consists primarily of assets denominated in foreign currency while its liabilities are in Hong Kong dollars, its net worth varies inversely with the exchange value of the Hong Kong dollar (the lower the exchange rate, the greater the government's net worth)" (p. 18). A second and a stronger incentive for the government was to avoid a major disruption of Hong Kong's economy that would otherwise have been caused by numerous bankruptcies in the banking and financial sector. After the collapse of the real estate and stock market, BSW reason, a proportionate devaluation of the Hong Kong dollar was the only way to prevent bankruptcies of banks and other financial firms. How could devaluation avoid bankruptcies?

Typically, a substantial part of the assets of Hong Kong's financial firms is in the form of loans denominated in Hong Kong dollars usually with real assets (real estate or equity shares) as collateral. If the value of the collateral assets fell dramatically in Hong Kong dollar terms, then it is very likely that the loans would be defaulted on, thus ultimately causing bankruptcies of the financial firms. If, however, the value of the Hong Kong dollar falls along with declining asset values, the divergence between the value of the collateral assets and that of the loans would not be as devastating as in the absence of the devaluation. All values are calculated in terms of foreign currency, since the value of Hong Kong's real assets could be assumed to be determined in a world capital market. Of course, the depositors who held financial firms' Hong Kong dollar-denominated liabilities would suffer losses due to the devaluation. (Note 4)

BSW sum up the argument:

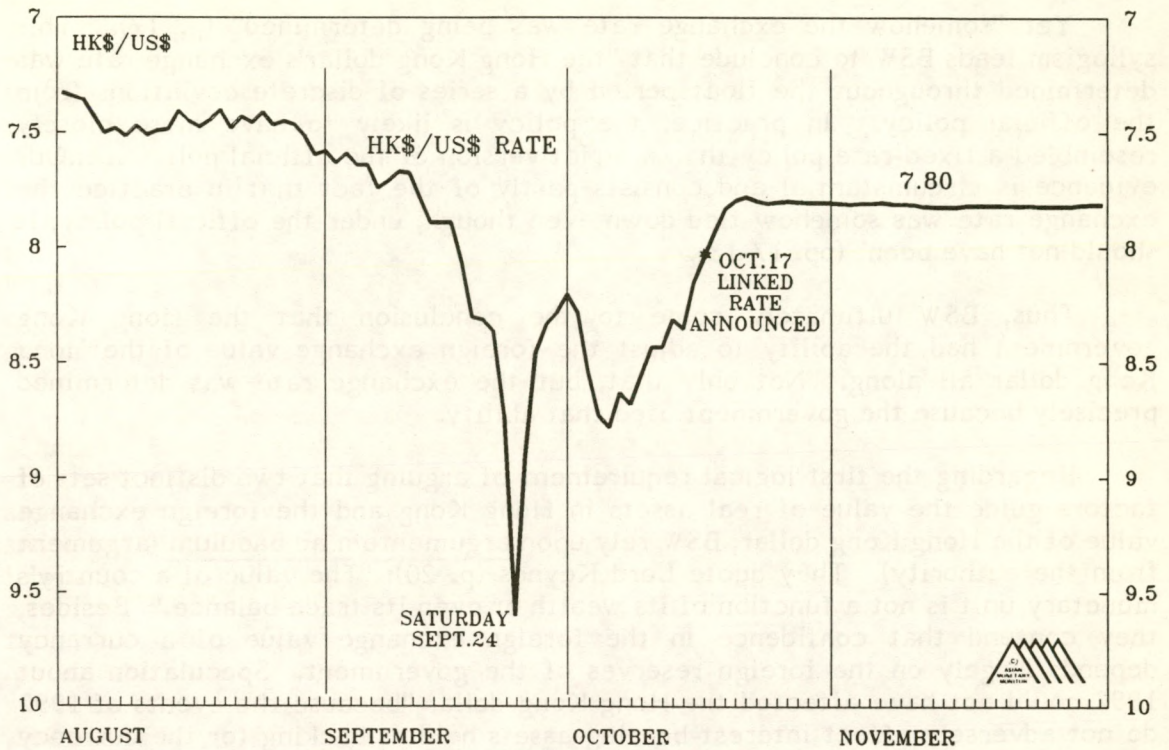
A depreciation could smooth the Hong Kong economy's adjustment to lower real property values in terms of foreign currency. The adjustment would be smoother not because financial firms' capital losses would be averted, but because they would be allocated partly to depositors, thereby helping to preserve existing financial institutions (pp. 19-20).

Thus the Hong Kong government did seem to have had a good reason to undertake devaluation - to save the economy from the disastrous effects of bankruptcies in the banking and financial sector.

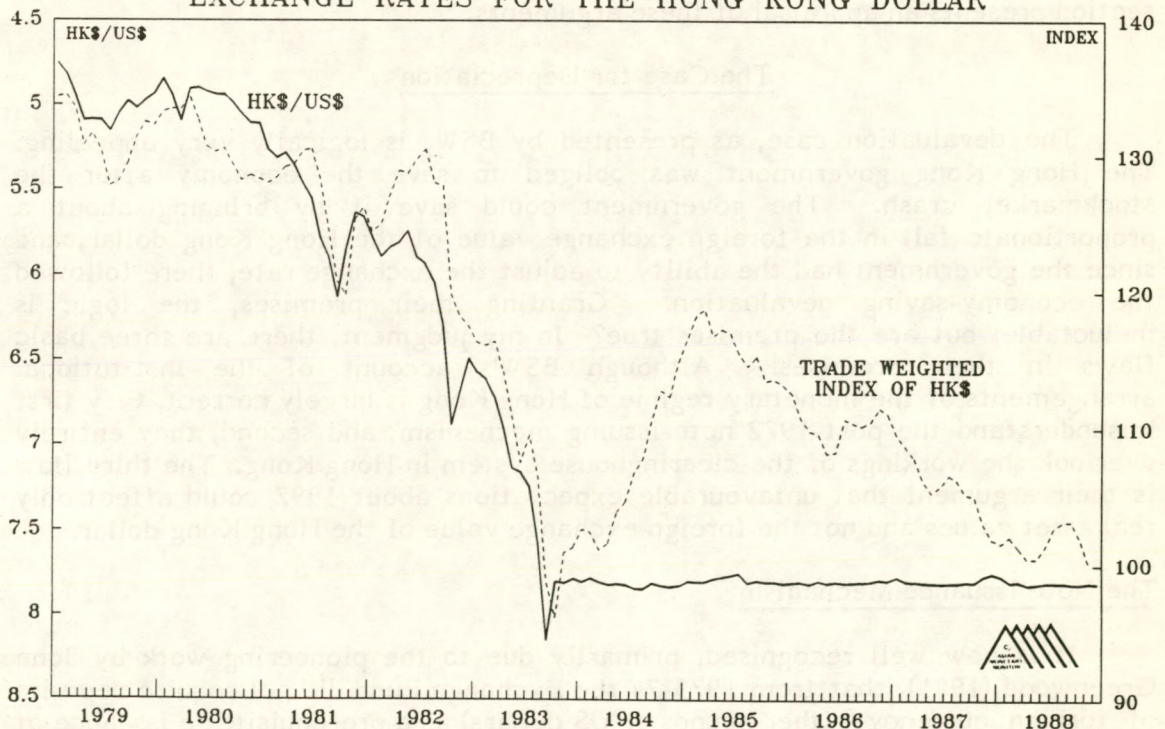
Capacity for Devaluation

To demonstrate that the Hong Kong government was not only willing but also able to engineer a devaluation, BSW apply a particular theory of exchange rate determination. It is well known that the Hong Kong dollar was allowed to float from November 1974 until the linked rate system in October 1983. Under the float regime, determination of the quantity as well as the price of the Hong Kong dollar was left to market forces. BSW "strongly suspect that the Hong Kong government did not actually follow its official float policy. A major reason for this suspicion is that if the policy had been followed, then the exchange rate for the Hong Kong dollar would have been indeterminate" (p. 16). The absence of an exogenous determination of either the price or quantity of money would leave

HONG KONG BLACK SATURDAY 1983



HONG KONG EXCHANGE RATES FOR THE HONG KONG DOLLAR



the system without an anchor.

Yet "somehow the exchange rate was being determined" (p. 17). This syllogism leads BSW to conclude that "the Hong Kong dollar's exchange rate was determined throughout the float period by a series of discrete deviations from the official policy. In practice, the policy is likely to have more closely resembled a fixed-rate policy than a strict version of the official policy Our evidence is circumstantial and consists partly of the fact that in practice the exchange rate was somehow tied down even though, under the official policy, it should not have been" (pp. 17-18).

Thus, BSW ultimately come to the conclusion that the Hong Kong government had the ability to adjust the foreign exchange value of the Hong Kong dollar all along. Not only that, but the exchange rate was determined precisely because the government used that ability.

Regarding the first logical requirement of arguing that two distinct sets of factors guide the value of real assets in Hong Kong and the foreign exchange value of the Hong Kong dollar, BSW rely upon argumentum ad baculum (argument from the authority). They quote Lord Keynes (p. 20): "The value of a country's monetary unit is not a function of its wealth or even its trade balance." Besides, they contend that confidence in the foreign exchange value of a currency depends largely on the foreign reserves of the government. Speculation about 1997 could not have affected the Hong Kong dollar "because the events of 1997 do not adversely affect interest-bearing assets held as backing for the currency by the Hong Kong government" (p. 14).

Overall, BSW's arguments for devaluation might appear to have some validity, and even have logical elegance, but are they sound? The following section presents an appraisal of these arguments.

The Case for Depreciation

The devaluation case, as presented by BSW, is logically very appealing. The Hong Kong government was obliged to save the economy after the stockmarket crash. The government could save it by bringing about a proportionate fall in the foreign exchange value of the Hong Kong dollar, and since the government had the ability to adjust the exchange rate, there followed the economy-saving devaluation. Granting their premises, the logic is ineluctable; but are the premises true? In my judgment, there are three basic flaws in their premises. Although BSW's account of the institutional arrangements of the monetary regime of Hong Kong is largely correct, they first misunderstand the post-1972 note-issuing mechanism, and second, they entirely overlook the workings of the clearinghouse system in Hong Kong. The third flaw is their argument that unfavourable expectations about 1997 could affect only real asset values and not the foreign exchange value of the Hong Kong dollar.

The Note Issuance Mechanism

It is now well recognised, primarily due to the pioneering work by John Greenwood (1981), that from 1973-74 the Exchange Fund did not require deposits of foreign currency (either pounds or US dollars) as a prerequisite to issuance of

Certificates of Indebtedness. In short, the note-issuing banks were able to get Certificates of Indebtedness and thereby expand the monetary base simply by crediting the Exchange Fund's Hong Kong dollar accounts maintained with them. The Exchange Fund, depending on the market exchange rate of the Hong Kong dollar, converted those Hong Kong dollar deposits into foreign exchange reserves at its own discretion. But this ex post foreign exchange constraint drastically reduced the cost of money creation for the banks and also undermined the extent of control of the monetary base via the overall balance-of-payments position (Jao, 1988).

Over and above the lack of the foreign exchange constraint over the monetary base, the 1973-74 change that deprived the Exchange Fund of any effectiveness in the foreign exchange market was the practice of keeping all Hong Kong dollars that were due to the Exchange Fund on forex transactions in its accounts with the note-issuing banks. Thus, for example, to check the falling Hong Kong dollar, the Exchange Fund would sell foreign currency to the private sector in exchange for Hong Kong dollar deposits. But, instead of removing these Hong Kong dollar deposits from the banking system, as usually happens in case of other central banks, they were deposited with the note-issuing banks. The ultimate result of the foreign exchange market intervention by the Exchange Fund would be to simply transfer ownership of Hong Kong dollar deposits from the private sector to the Exchange Fund, leaving the total amount of deposits in the banking system unchanged.

In sum, attempts by the Exchange Fund to support the Hong Kong dollar could have little significance. (Note 5) As explained above, under existing institutional arrangements, the ability of the Hong Kong government to influence the exchange rate of the Hong Kong dollar was highly questionable, let alone its ability to engineer a 33% devaluation. This aspect when coupled with the unique position of the Hongkong Bank in the clearing system makes the impotence of Exchange Fund beyond doubt.

The Clearing House and the Hongkong Bank

Without going into the detailed arrangements and workings of the clearing system, it will suffice for our purpose to focus on one aspect of it: the quasi-central-bank status of the Hongkong Bank. A designated number of banks (nine, at the moment) called Settlement or Clearing Banks maintain an account with the Hongkong Bank, the Management Bank of the Clearing House. But Hongkong Bank itself does not have any settlement account. Therefore, all transactions with the Hongkong Bank or its customers by any other Settlement Bank or its customers are settled by crediting or debiting the account of that Settlement Bank, as the case may be.

The above arrangement of the Clearing House gives the Hongkong Bank, first, access to the net clearing balance of the banking system for its own use. No official figures are available, but the daily net clearing balance is estimated to vary between 500 million to 2 billion Hong Kong dollars. The Hongkong Bank does not pay any interest on the balances of the Settlement Banks, but does charge handsomely on the deficits in their accounts. Secondly, the arrangement makes the Hongkong Bank a quasi-central bank: it can act as a lender of last resort simply by crediting the account of a bank in need, since there is no

corresponding account of the Hongkong Bank in the clearing system against which to debit that loan. By the same means, the Hongkong Bank can adjust the liquidity in the interbank market and thus influence the interbank interest rate. In fact, under the arrangement, Hongkong Bank had greater powers to influence the exchange rate of the Hong Kong dollar than the Exchange Fund.

How might the privileges of the Hongkong Bank affect Exchange Fund's ability to manoeuvre the exchange rate of the Hong Kong dollar? A typical central bank can influence the exchange rate of the domestic currency by two means - direct foreign exchange market intervention and/or interventions in the domestic money market (for example, open market operations of the Federal Reserve in the US). In either case, the ultimate objective is to mop up the domestic currency and thereby reduce the money supply and tighten the liquidity in the banking system. As we saw earlier, the Exchange Fund's foreign exchange market intervention did not have any influence since it did not affect the total amount of deposits in the banking system. Unfortunately, the Exchange Fund's money market operations met the same fate due primarily to the special status of the Hongkong Bank in the clearing system.

The Exchange Fund, for example, borrows Hong Kong dollars in an attempt to tighten interbank liquidity and thus help stabilise a weakening Hong Kong dollar. As long as the borrowed funds are kept in the account with the Hongkong Bank, the total liquidity of the market does not change, and the Exchange Fund's intervention would be of no consequence. But let us grant some theoretical acuity to the Exchange Fund and assume that they tuck away the borrowed funds at, say, the Admiralty Centre. The removal of the funds from the banking system would tend to push up the interbank interest rate and alleviate the downward pressure on the Hong Kong dollar. Regrettably, even under this best possible scenario, the Exchange Fund cannot maintain its grip on the short-run interbank liquidity.

If the Exchange Fund's hoarding drives up the interbank rate above the best lending rate (BLR), arbitrageurs can borrow at the BLR and then lend in the interbank market. It is difficult to change the BLR on a daily basis since it must be decided by the Hong Kong Association of Banks (HKAB). Besides, rising interbank rates would motivate people to run down their HKAB-type deposits - the deposits on which the interest rate is fixed by HKAB. The market responses described above are effective largely because the BLR and the interest rates on deposits are fixed by a statutory cartel--the Hong Kong Association of Banks.

Over and above the two market responses, there are two other responses which have an overwhelming countervailing effect on the money market intervention of the Exchange Fund. The noteworthy feature of the other two responses is that they occur only because of the special status of the Hongkong Bank in the clearing system. As the Hong Kong dollar falls, customers of the Hongkong Bank might be switching out of the Hong Kong dollar into, say, US dollars. The Hongkong Bank's purchase of the US dollars, on behalf of its customers, from another bank would be normally paid for by crediting the account of one of the Settlement Banks. Since there is no account of the Hongkong Bank to debit, this would increase the net clearing balance and relieve the tightness in the interbank market. One must note that this situation arises only when the Hongkong Bank undertakes the transaction. If any other bank had

bought the US dollars, there would only be a change in the ownership of the Hong Kong dollars, leaving the net clearing balance unchanged.

The second and the most important counteracting response, as interbank rates rise, comes from the Hongkong Bank. It can increase the liquidity or the net clearing balance by simply crediting the account of the needy bank, just like a typical central bank. The Hongkong Bank's power to create liquidity like a central bank has often compelled it to act as a lender of last resort to failing banks. In Hong Kong, this power of the Hongkong Bank usually surfaces in discussions as a "conflict-of-interest" argument. The Hongkong Bank has a private (profit) interest in using its "creative power", especially during situations of tight liquidity. The public interest, on the other hand, requires it to refrain and maintain the tight liquidity situation.

It is futile, therefore, for the Exchange Fund even to tuck away Hong Kong dollars in order to influence the exchange rate of the Hong Kong dollar in the short-run. The central-bank-type powers of the Hongkong Bank as well as the futility of money market operations were attested to by the Secretary for Monetary Affairs in a press release of 15 July, 1988. The Secretary also remedied this crucial drawback of the clearing system by requiring the Hongkong Bank to maintain an account with the Exchange Fund with the balance not less than the net clearing balance of the clearing house.

The understanding of the note-issuing mechanism and the Clearing House arrangements before the link-rate system of October 1983 and July 1988 changes, leave no doubt about the inability of the Exchange Fund to bring about a "timely devaluation", especially against the wishes and expectations of the market.

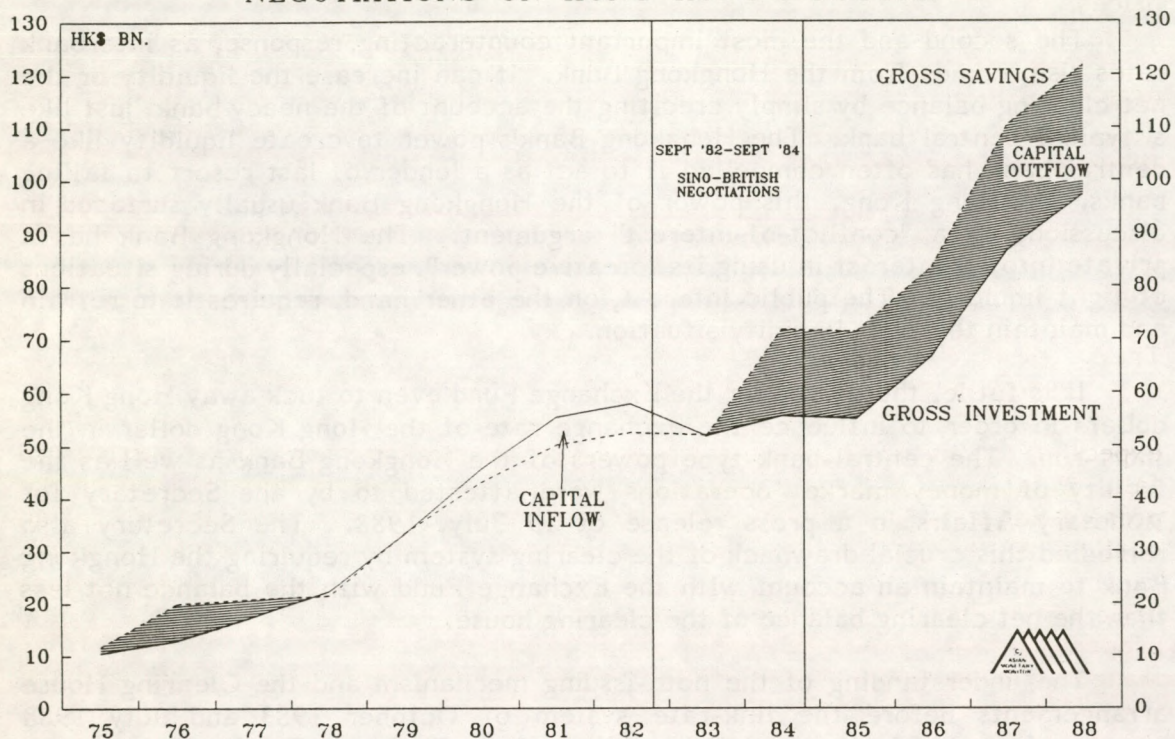
On the Theory of Exchange Rate Determination

Of course, BSW admit that they do not have any direct evidence on the Exchange Fund's fixing of the exchange rate, but their theory of exchange rate determination a la Kareken and Wallace (1981) makes them "strongly suspect" such a fixing. We may briefly point out an alternative theory proposed by Bennett McCallum (1981) and the results of an empirical test on Hong Kong done by Ramon Moreno (1986).

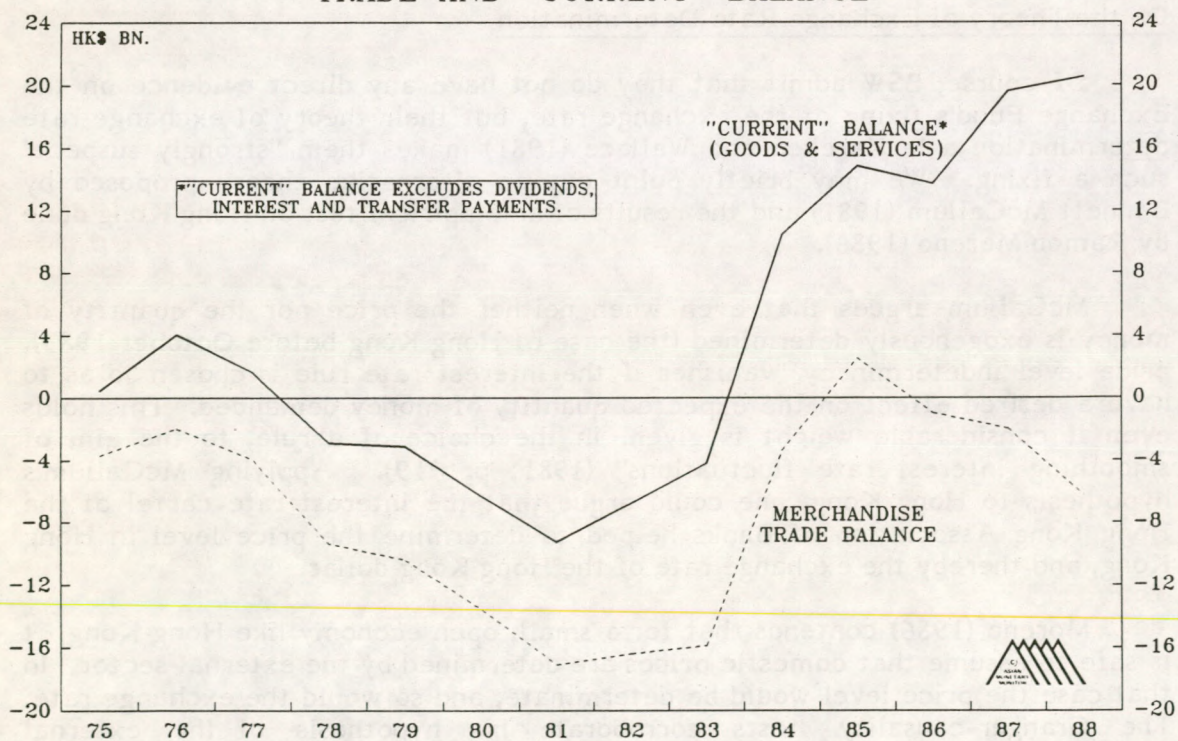
McCallum argues that even when neither the price nor the quantity of money is exogenously determined (the case of Hong Kong before October 1983), price level indeterminacy "vanishes if the interest rate rule is chosen so as to have a desired effect on the expected quantity of money demanded. This holds even if considerable weight is given, in the choice of a rule, to the aim of smoothing interest rate fluctuations" (1981, p. 319). Applying McCallum's hypothesis to Hong Kong, one could argue that the interest rate cartel of the Hong Kong Association of Banks helped to determine the price level in Hong Kong, and thereby the exchange rate of the Hong Kong dollar.

Moreno (1986) contends that for a small, open economy like Hong Kong, it is safe to assume that domestic prices are determined by the external sector. In that case the price level would be determinate, and so would the exchange rate. The Granger-causality tests corroborate his hypothesis of the external

HONG KONG CAPITAL FLOWS BEFORE AND AFTER THE SINO-BRITISH NEGOTIATIONS ON HONG KONG'S FUTURE



HONG KONG TRADE AND "CURRENT" BALANCE



determination of the prices in Hong Kong since Moreno failed to establish any "causal relationship" between the domestic money supply and the domestic prices.

The arguments of McCallum and Moreno suggest, at least tentatively, that BSW need not proceed directly from their particular theory of exchange rate determination to the presumption that the Exchange Fund must "somehow" be fixing the exchange rate.

The last point that we need to deal with is BSW's contention that the uncertainty about 1997 could not have affected the exchange value of the Hong Kong dollar.

The Influence of Expectations on Asset Values and Foreign Exchange Value

It is easy to see how adverse expectations about 1997 could reduce expected returns from real estate and stocks, causing their current values to fall. What BSW fail to recognise is that the same expectations that lower the present value of the Hong Kong dollar-denominated assets, may also prompt an outflow of capital. If the expected return on capital declines in Hong Kong, capital will move out to seek more profitable employment. In 1983, expectations of lower rates of return and uncertainties regarding the political structure and property rights undoubtedly generated a momentous flight of capital from Hong Kong. The resulting unprecedented demand for foreign currencies caused the unusual depreciation of the Hong Kong dollar.

It is the outflow of capital, therefore, that links the unfavourable expectations about 1997 with the collapse of the Hong Kong dollar. This link is entirely overlooked by BSW. Despite all of its attempts to prevent the slide of the Hong Kong dollar, the Hong Kong government became a helpless spectator precisely because of the fundamental flaws in the arrangements of the monetary system and the clearinghouse.

Conclusion:

Though BSW's case for a government engineered devaluation in 1983 is logically elegant, it is far from watertight. Serious deficiencies in their case derive from two unique features of Hong Kong's monetary arrangements and practice, namely, the note-issuing mechanism and the quasi-central bank status of the Hongkong Bank; and also from the role of capital flight. The first two points establish the inability of the Exchange Fund to influence the exchange rate of the Hong Kong dollar to any significant degree, especially against the wishes and expectations of the market. The outflow of capital contradicts BSW's denial of a connection between adverse expectations about 1997 and the fall of the Hong Kong dollar.

Given these facts, the decline of the Hong Kong dollar in 1983 must be considered an unintended depreciation rather than a government-induced devaluation.

Notes

1. Even after reading the explanations of the Hong Kong economists, Beers, Sargent, and Wallace (1983) seem not have changed their views since the article is reprinted in Sargent (1986). All page references in the text, unless otherwise specified, are to the 1983 article.
2. BSW's view seems to corroborate the charge made by China that the Hong Kong government was devaluing the dollar to play an "economic card".
3. For an insightful account of this regime, see Greenwood (1982). Moreno (1986) calls the regime a "real bills doctrine in operation". Some of the relevant aspects of the regime, namely, the note-issuing mechanism and the clearing house arrangements are discussed later in the text.
4. For more details and an illuminating algebraic example demonstrating the effects on asset value of exchange rate decline, see Beers et al. (1983, pp. 18-19).
5. For a precise demonstration of this argument, see Greenwood (1981).

References

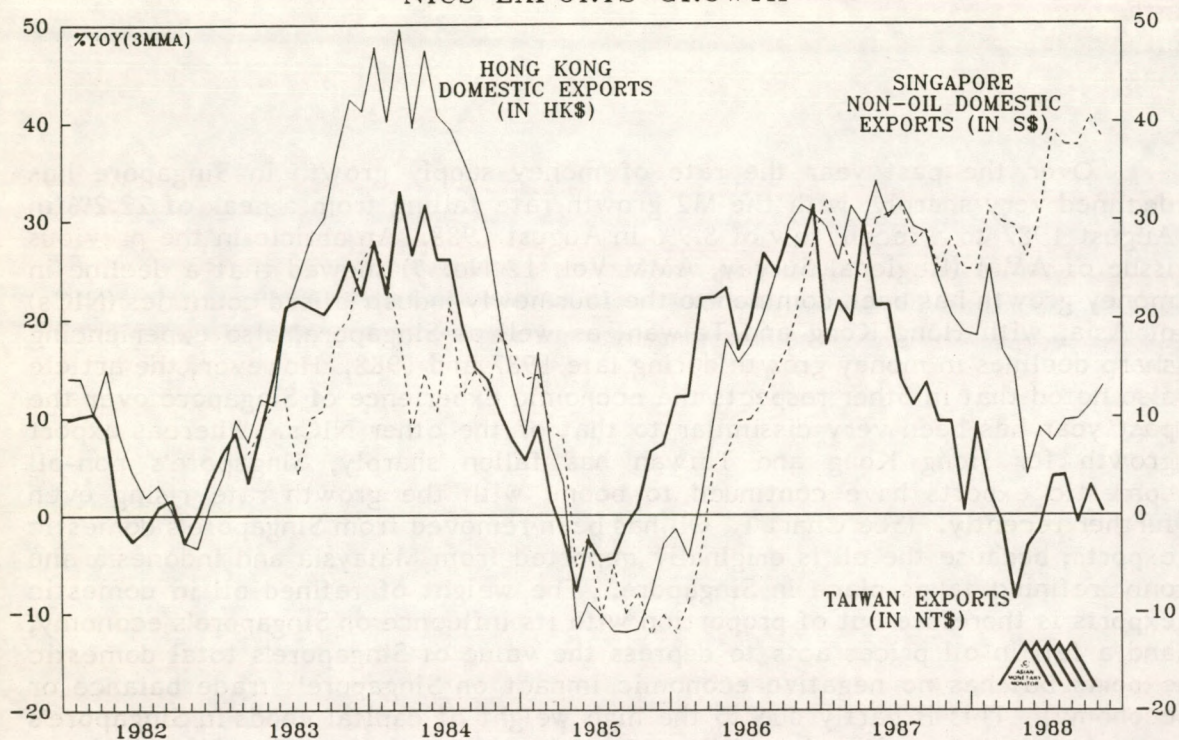
- 1) Beers, David T., Thomas J. Sargent, and Neil Wallace, "Speculation About the Speculation Against the Hong Kong Dollar," Federal Reserve Bank of Minneapolis Quarterly Review, Fall 1983, pp. 14-22. Reprinted in Thomas J. Sargent, Rational Expectations and Inflation, Chapter 6 (New York: Harper & Row, 1986).
- 2) Greenwood, John G., "Time to Blow the Whistle," Asian Monetary Monitor, July-Aug. 1981, Vol. 5, No. 4, pp. 15-34.
- 3) Greenwood, John G., "Hong Kong's Financial Crisis: History, Analysis, Prescription," *ibid.*, Nov.-Dec. 1982, Vol. 6, No. 6, pp. 1-69.
- 4) Jao, Y.C., "A Monetary System and Banking Structure," Manuscript, 1988.
- 5) Kareken, John, and Neil Wallace, "On the Indeterminacy of Equilibrium Exchange Rates," Quarterly Journal of Economics, May 1981, pp. 207-22.
- 6) McCallum, Bennett T., "Price Level Determinacy with an Interest Rate Policy Rule and Rational Expectations," Journal of Monetary Economics, 1981, Vol. 8, pp. 319-329.
- 7) Moreno, Ramon, "Monetary Control Without a Central Bank: The Case of Hong Kong," Federal Reserve Bank of San Francisco Economic Review, Spring 1986, pp. 17-37.

SINGAPORE: A DELIBERATE TIGHTENING OF MONETARY POLICY

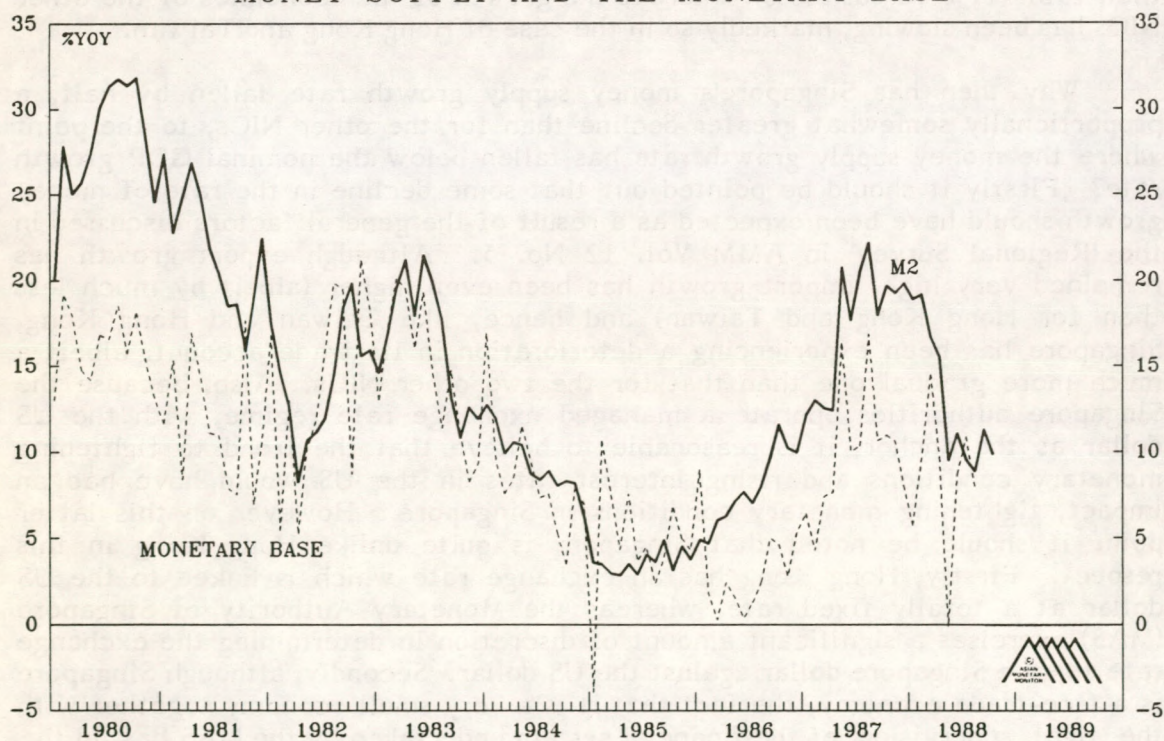
Over the past year the rate of money supply growth in Singapore has declined very sharply, with the M2 growth rate falling from a peak of 22.2% in August 1987 to a recent low of 8.9% in August 1988. An article in the previous issue of AMM (Regional Survey, AMM Vol. 12 No. 5) showed that a decline in money growth has been common to the four newly industrialised countries (NICs) of Asia, with Hong Kong and Taiwan, as well as Singapore, also experiencing sharp declines in money growth during late 1987 and 1988. However, the article also noted that in other respects the economic experience of Singapore over the past year has been very dissimilar to that of the other NICs. Whereas export growth for Hong Kong and Taiwan has fallen sharply, Singapore's non-oil domestic exports have continued to boom, with the growth rate rising even further recently. (See Chart 1. Oil has been removed from Singapore's domestic exports, because the oil is originally imported from Malaysia and Indonesia and only refining takes place in Singapore. The weight of refined oil in domestic exports is therefore out of proportion with its influence on Singapore's economy, and a fall in oil prices acts to depress the value of Singapore's total domestic exports but has no negative economic impact on Singapore's trade balance or economy). This is partly due to the high weight of capital goods in Singapore's exports relative to the other NICs and partly due to the fact that Singapore has not been losing competitiveness whereas the other NICs have, either because of domestic inflation or currency revaluation. Finally, and largely as a result of all of these factors, Singapore will show a substantially higher growth rate for 1988 than 1987 (11% versus 8.8%), whereas the growth of the economies of the other NICs has been slowing, markedly so in the case of Hong Kong and Taiwan.

Why then has Singapore's money supply growth rate fallen by half, a proportionally somewhat greater decline than for the other NICs, to the point where the money supply growth rate has fallen below the nominal GDP growth rate? Firstly it should be pointed out that some decline in the rate of money growth should have been expected as a result of the general factors discussed in the 'Regional Survey' in AMM Vol. 12 No. 5. Although export growth has remained very high, import growth has been even higher (albeit by much less than for Hong Kong and Taiwan) and hence, like Taiwan and Hong Kong, Singapore has been experiencing a deterioration in its trade account, albeit a much more gradual one than that for the two other NICs. Also, because the Singapore authorities operate a managed exchange rate regime, with the US dollar as the anchor, it is reasonable to believe that the trend to tightening monetary conditions and rising interest rates in the US would have had an impact, tightening monetary conditions in Singapore. However on this latter point it should be noted that Singapore is quite unlike Hong Kong in this respect. Firstly, Hong Kong has an exchange rate which is linked to the US dollar at a totally fixed rate, whereas the Monetary Authority of Singapore (MAS) exercises a significant amount of discretion in determining the exchange rate for the Singapore dollar against the US dollar. Secondly, although Singapore is a free-trade economy, the fact that it is a very small economy together with the tight supervision of the financial system undertaken by the MAS has, in the

SINGAPORE: CHART 1
NICs EXPORTS GROWTH



SINGAPORE: CHART 2
MONEY SUPPLY AND THE MONETARY BASE



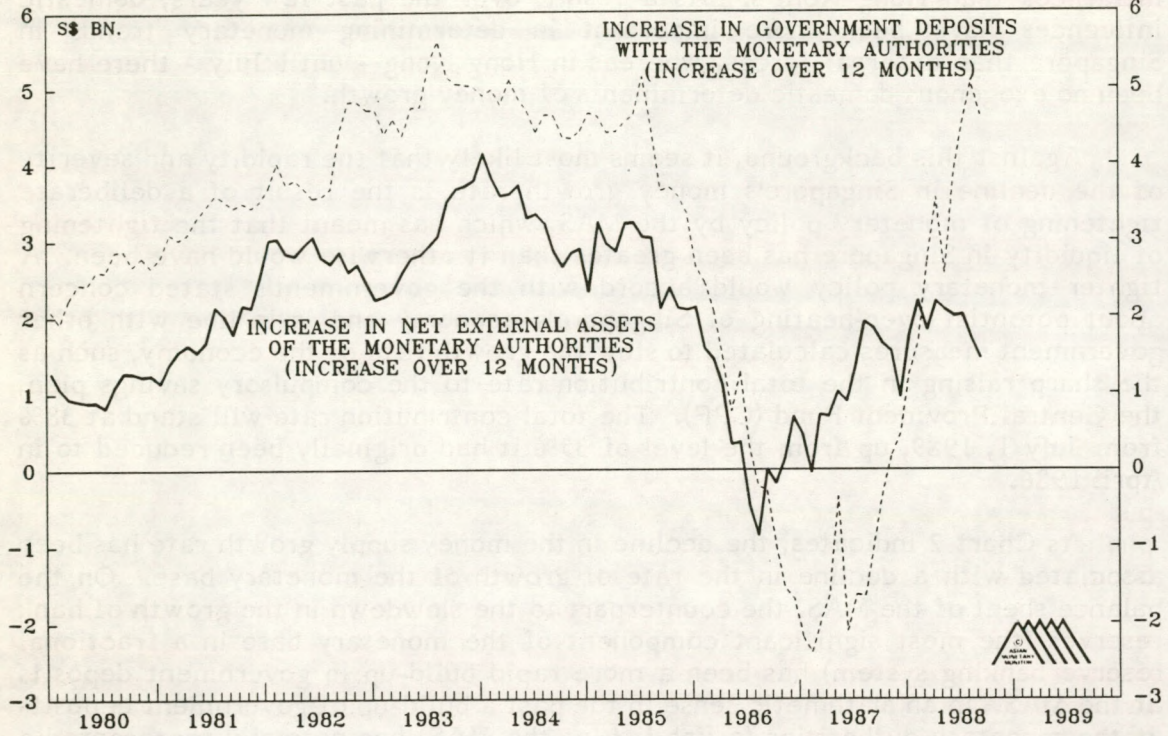
past, allowed Singapore's monetary system to be more insulated from external influences than Hong Kong's. As a result, over the past few years, domestic influences have been more important in determining monetary trends in Singapore than external forces, whereas in Hong Kong - until July - there have been no exogenous domestic determinants of money growth.

Against this background, it seems most likely that the rapidity and severity of the decline in Singapore's money growth rate is the result of a deliberate tightening of monetary policy by the MAS, which has meant that the tightening of liquidity in Singapore has been greater than it otherwise would have been. A tighter monetary policy would accord with the government's stated concern about potential over-heating of Singapore's economy and is in line with other government measures calculated to slow the growth rate of the economy, such as the sharp raising in the total contribution rate to the compulsory savings plan, the Central Provident Fund (CPF). The total contribution rate will stand at 38% from July 1, 1989, up from the level of 35% it had originally been reduced to in April 1986.

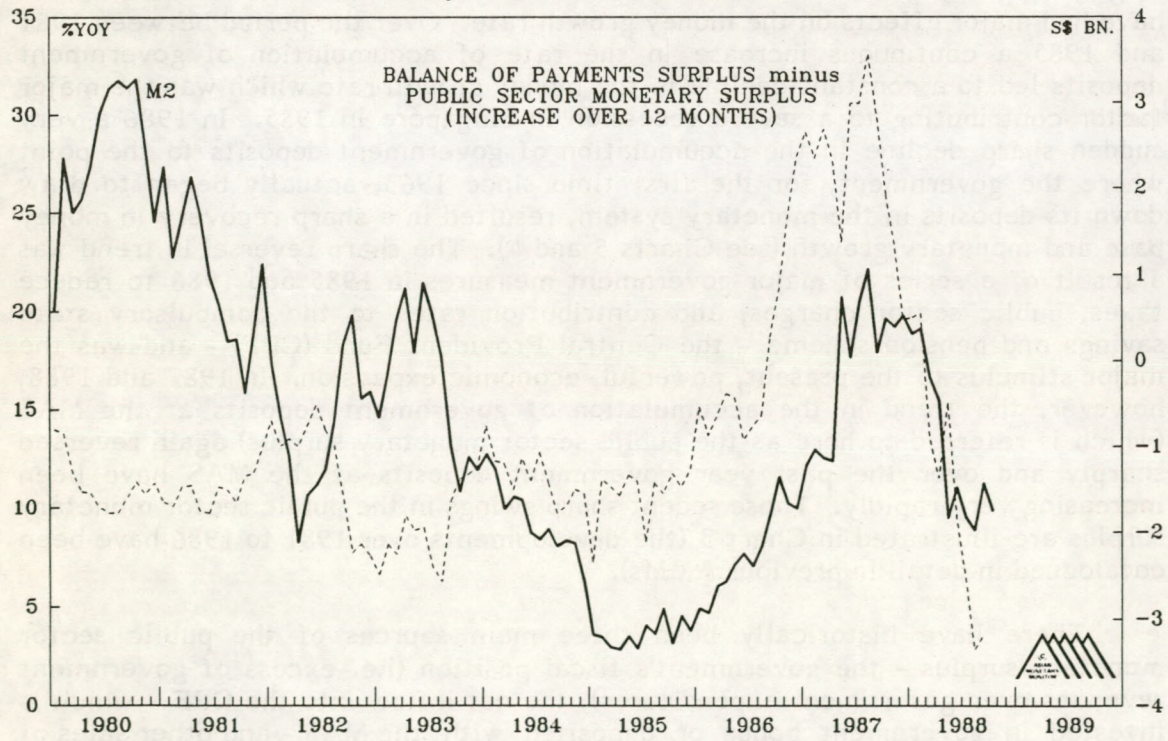
As Chart 2 indicates, the decline in the money supply growth rate has been associated with a decline in the rate of growth of the monetary base. On the balance sheet of the MAS, the counterpart to the slowdown in the growth of bank reserves (the most significant component of the monetary base in a fractional reserve banking system) has been a more rapid build-up in government deposits at the MAS. In an arithmetic sense in the past a build-up of government deposits at the monetary authorities (a liability of the MAS) has normally represented a large negative contribution to the growth rate of the monetary base, generally offset by a similar, positive, contribution from the increase in the foreign reserves (an asset of the MAS). However, in recent years at different times large changes in the rate of accumulation of government deposits at the MAS have had major effects on the money growth rate. Over the period between 1981 and 1985 a continuous increase in the rate of accumulation of government deposits led to a constant decline in the money growth rate which was the major factor contributing to a severe recession in Singapore in 1985. In 1986 a very sudden sharp decline in the accumulation of government deposits to the point where the government, for the first time since 1963, actually began to draw down its deposits in the monetary system, resulted in a sharp recovery in money base and monetary growth (see Charts 3 and 4). The sharp reversal in trend was a result of a series of major government measures in 1985 and 1986 to reduce taxes, public sector charges, and contribution rates to the compulsory state savings and pension scheme - the Central Provident Fund (CPF) - and was the major stimulus to the present, powerful, economic expansion. In 1987 and 1988, however, the trend in the accumulation of government deposits at the MAS (which is referred to here as the public sector monetary surplus) again reversed sharply and over the past year government deposits at the MAS have been increasing very rapidly. These recent sharp swings in the public sector monetary surplus are illustrated in Chart 3 (the developments over 1981 to 1986 have been catalogued in detail in previous AMMs).

There have historically been three main sources of the public sector monetary surplus - the government's fiscal position (i.e. excess of government revenues over government expenditures), the net inflow into the CPF - which is invested in government bonds or deposited with the MAS - and other sales of

SINGAPORE: CHART 3
PUBLIC SECTOR MONETARY SURPLUS AND THE BALANCE OF PAYMENTS



SINGAPORE: CHART 4
LIQUIDITY INDICATORS



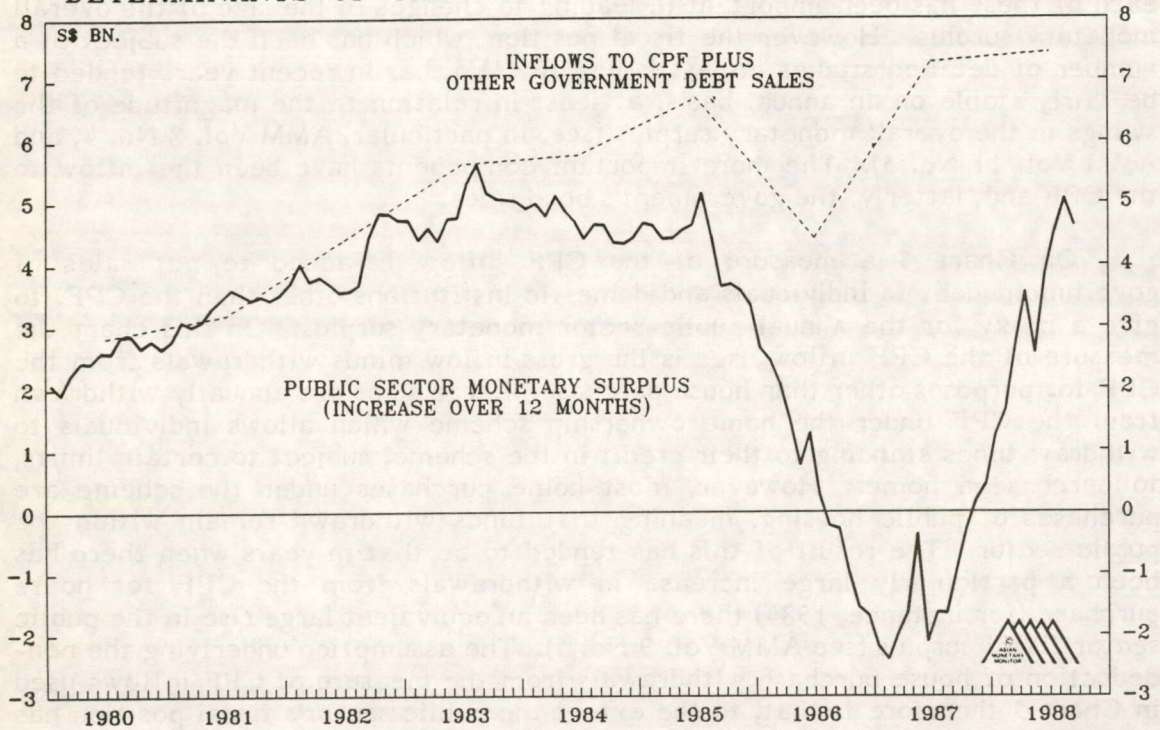
government bonds (i.e. other than to the CPF). At different times in the past each of these has been important in leading to changes in the size of the overall monetary surplus. However the fiscal position, which has been the subject of a number of detailed studies in past issues of AMM, has in recent years tended to be fairly stable on an annual basis, at least in relation to the magnitude of the swings in the overall monetary surplus (see, in particular, AMM Vol. 8 No. 4, and AMM Vol. 11 No. 5). The more important components have been the inflow to the CPF and, latterly, the government's bond sales.

On Chart 5 a measure of the CPF inflow is added to net sales of government debt to individuals and domestic institutions other than the CPF, to give a proxy for the annual public sector monetary surplus. On this chart the measure of the CPF inflow used is the gross inflow minus withdrawals from the CPF for purposes other than house purchase. Large sums are annually withdrawn from the CPF under the home ownership scheme which allows individuals to withdraw funds standing to their credit in the scheme, subject to certain limits, to purchase a home. However, most home purchases under the scheme are purchases of public housing, meaning that funds withdrawn remain within the public sector. The result of this has tended to be that in years when there has been a particularly large increase in withdrawals from the CPF for house purchase (for instance, 1984) there has been an equivalent large rise in the public sector fiscal surplus (see AMM Vol. 9 No. 5). The assumption underlying the non-deduction of house purchase withdrawals from the measure of CPF inflows used in Chart 5 therefore is that, to the extent the public sector's fiscal position has been relatively stable, it is the fiscal position exclusive of revenues derived from public housing sales which has tended to stability.

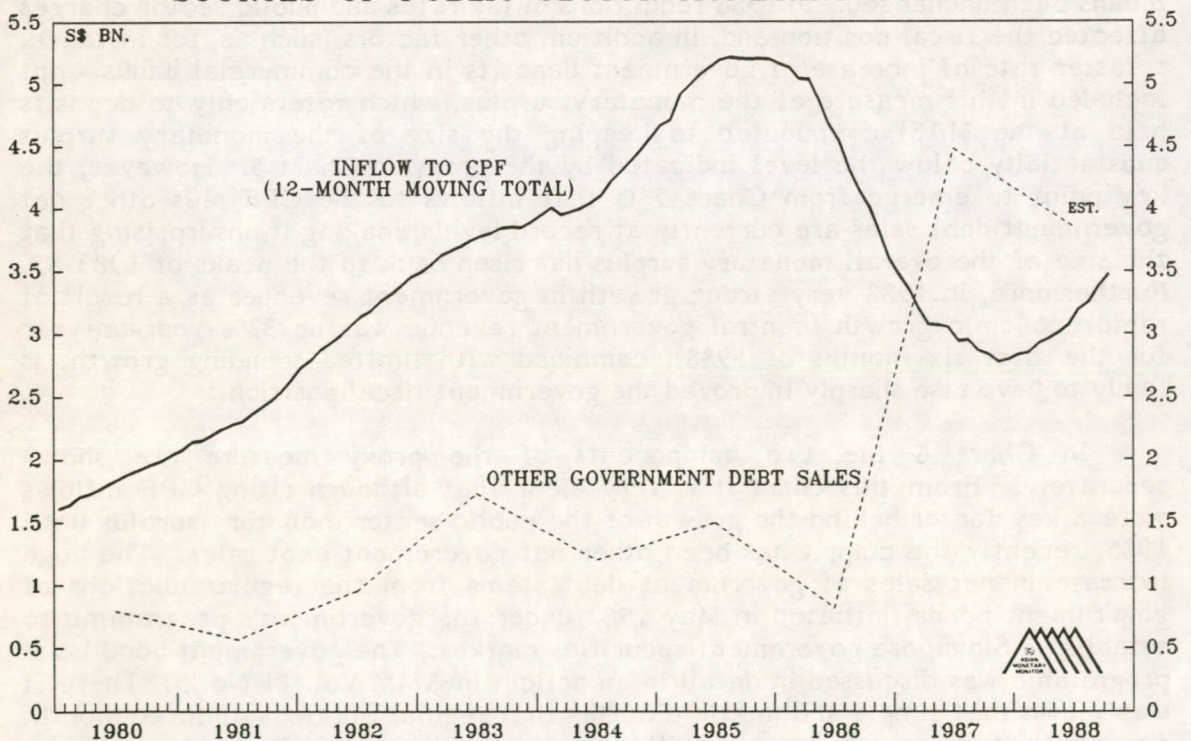
In practice, of course, the fiscal position even on this measure has by no means been unchanged. In 1986 reductions in tax rates and public sector charges affected the fiscal position and, in addition, other factors (such as, for instance, a faster rate of increase of government deposits in the commercial banks - not included in this measure of the monetary surplus, which refers only to deposits held at the MAS) contributed to keeping the size of the monetary surplus substantially below the level indicated by the proxy in Chart 5. However, the key point to emerge from Chart 5 is that inflows to the CPF plus other net government debt sales are currently at record levels, making it unsurprising that the size of the overall monetary surplus has risen back to the peaks of 1983-85. Furthermore, in 1988 very strong growth in government revenues as a result of rapid economic growth (central government revenue was up 37% year-on-year for the first six months of 1988), combined with limited spending growth, is likely to have also sharply improved the government fiscal position.

In Chart 6 the two components of the proxy measure are shown separately. From this chart it is very clear that although rising CPF inflows were a key factor behind the growth of the public sector monetary surplus until 1985, recently the culprit has been other net government debt sales. The huge increase in net sales of government debt stems from the regular auctions of government bonds, initiated in May 1987 under the government's programme to establish a Singapore government securities market. The government bond issue programme was discussed in detail in an article in AMM Vol. 11 No. 5. There it was shown that simple arithmetic dictates that regular auctions of three month, six month and one year treasury bills, together with two and five year bonds, to

SINGAPORE: CHART 5
DETERMINANTS OF THE PUBLIC SECTOR MONETARY SURPLUS



SINGAPORE: CHART 6
SOURCES OF PUBLIC SECTOR MONETARY SURPLUS



achieve the government's target of a total gross issue of S\$35 billion worth of debt over a five year period would result in a large net issue in the earlier years but a much smaller one in later years (because in later years new debt issued would largely only replace maturing debt and not constitute an increase in the net issue). This would be in accordance with the MAS' desire to achieve the bulk of the increase in the outstanding amount of government securities in the early part of the five year period. To date, since May 1987, excluding issues of three month treasury bills, the authorities have issued a total of S\$6.7 billion gross of six month to five year debt through the auction programme, for a total net issue of S\$4.9 billion.

The large increase in government bond sales, and the corresponding large build-up in government deposits at the MAS, can be seen as the major component of the decline in monetary base growth in an arithmetic sense. However, it is very unlikely that the decline in money growth has been the passive result of the bond auction programme but far more likely that it has been the deliberate policy of the MAS to reduce the rate of money growth. Given the concerns of industry that heavy government bond issues could drain liquidity from the economy the MAS stated at the outset of the bond issue programme that they would manage the bond issues carefully with regard to the impact on liquidity, recycling government deposits as and when necessary. 'Recycling' in this context means placing funds raised from bond issues back in the domestic commercial banking system, meaning that the bond sales would then result in an increase in government deposits in the commercial banks but not at the MAS. Because central government deposits in the commercial banks do not carry reserve requirements and do not constitute part of the money supply, such an increase in government deposits does not have any negative implications for monetary trends. Indeed, central government deposits at the commercial banks have been growing rapidly, suggesting that the MAS has been partly recycling funds raised through debt auctions and that not all the increase in government debt sales has contributed to an increase in the public sector monetary surplus (i.e. the build-up of government deposits at the MAS). This can be seen from Chart 7, where it is evident that during 1988 the rate of growth of total bank deposits (which includes central government deposits) has outpaced the rate of growth of M2 (which does not) by a few percentage points, whereas previously the rate of growth of bank deposits had been below the rate of growth of M2. However, clearly, far less than the total of funds raised by the government has been recycled, meaning that money supply growth has nevertheless fallen.

To the extent that funds raised through government bond auctions have not been fully recycled but instead have had a contractionary effect on the money supply, causing money growth to be lower than it otherwise would have been, it must be assumed that this has been deliberate policy of the MAS. The other policy actions of the MAS, particularly with regard to the exchange rate, also point in the direction of an overt tightening of monetary policy. In an economy which is to a degree insulated from the outside world it may be possible for the authorities to pursue for a while independent objectives for both the money supply and the exchange rate. In the Pacific Rim area Taiwan, where the authorities for a long time kept the exchange rate undervalued while successfully restraining the growth of the money supply, is probably the best example of this. However, even in the case of Taiwan the pursuit of the twin objectives of a 'competitive' exchange rate and a non-inflationary rate of money growth

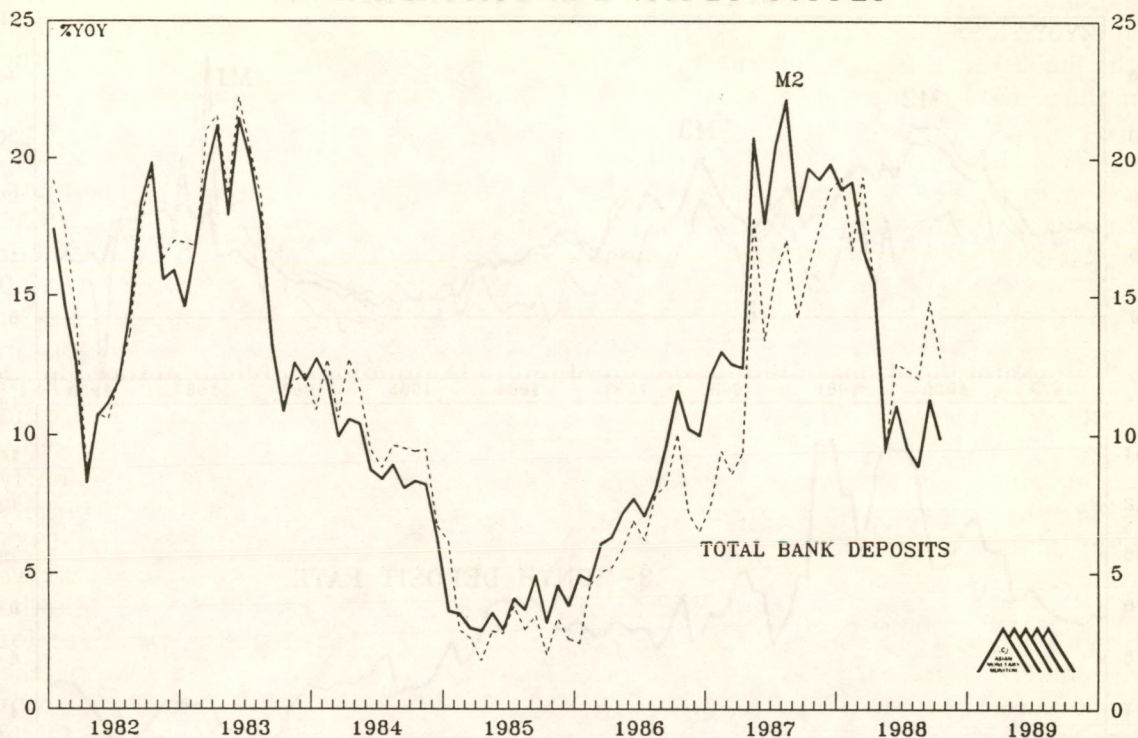
eventually proved impossible, leading the authorities to revalue substantially the exchange rate for the Taiwanese currency. In the case of Singapore, which is a very markedly less insulated economy than Taiwan, it should be expected that the constraint to the pursuit of an independent monetary policy posed by the management of the exchange rate would begin to bite somewhat sooner.

In this light it is not surprising that the MAS, while slowing money growth, has also chosen to revalue slightly the exchange rate for the Singapore dollar. Having remained in a tight range between US\$1 = S\$2.06 and US\$1 = S\$2.0 between November 1987 and October 1988, over the past two months (November and December 1988), the Singapore currency has risen gradually above the S\$2.0 level to a current rate of around US\$1 = S\$1.94, a rise of about 4%. Nevertheless, despite the fact that Singapore has enjoyed a large gain in competitiveness since 1985 as a result of the Singapore dollar having been kept tied quite closely to a depreciating US dollar while the inflation rate in Singapore has remained very low, the Singapore dollar is not very markedly undervalued. In this respect it should be borne in mind that as recently as early 1985 the Singapore dollar was, by wide consensus, believed to be extremely overvalued, a factor many analysts considered to be a key cause of the 1985 recession. Our real effective exchange rate estimate, shown in Chart 8, shows that at the most recent calculation the real effective exchange rate for the Singapore dollar stood only about 7%-8% undervalued relative to the level (of around 85 on the index) at which it stood for most of the 1970s (not including the 'spike' upwards in the real effective exchange rate during 1973/74). The current account balance moved into surplus in 1986 but the surplus has remained fairly small (S\$1.14 billion in 1987) and through 1988 the trade balance has been slowly deteriorating (see Chart 9). Together, these facts suggest that, for the short term, the MAS may already have achieved close to half of the revaluation that may be needed to enable firm monetary conditions in Singapore to be maintained.

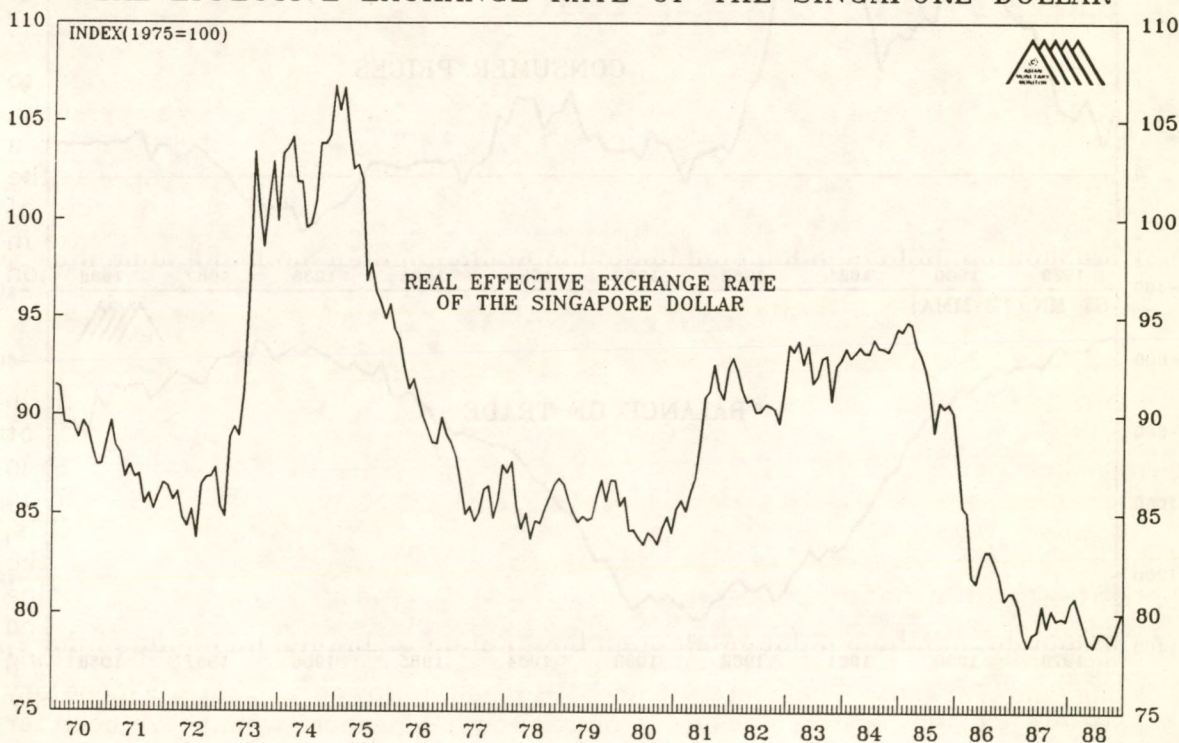
In the very long-term, however, if the Singapore authorities wished to maintain an inflation rate 2%-3% lower than in the US, as is the case currently, they would need to revalue the Singapore dollar against the US dollar at a roughly 2%-3% annual rate. A policy of gradual revaluation such as this was the policy of the MAS throughout most of the nineteen-seventies. In practice, of course, the actual rate of revaluation needed to maintain a 'low' inflation rate in Singapore - which is the true policy objective - depends upon the rate of inflation in the US, in turn a function of US monetary policy.

FORECAST: To conclude, the sharp decline in the rate of money growth in Singapore over the past year is largely the function of a deliberate tightening of monetary policy by the Monetary Authority of Singapore. It is true that even in the absence of any policy action by the MAS the rate of money growth in Singapore would probably have declined in common with that of the other NICs, because of a gradually deteriorating balance of payments position and the tightening of monetary policy in the US. However, Singapore has not been losing trade competitiveness through 1988 whereas Hong Kong and Taiwan have, and Singapore's trade deterioration has been nothing like as marked as that for Hong Kong and Taiwan. Therefore, if the MAS had followed a 'neutral' monetary policy it is likely that the monetary contraction in Singapore would have been far

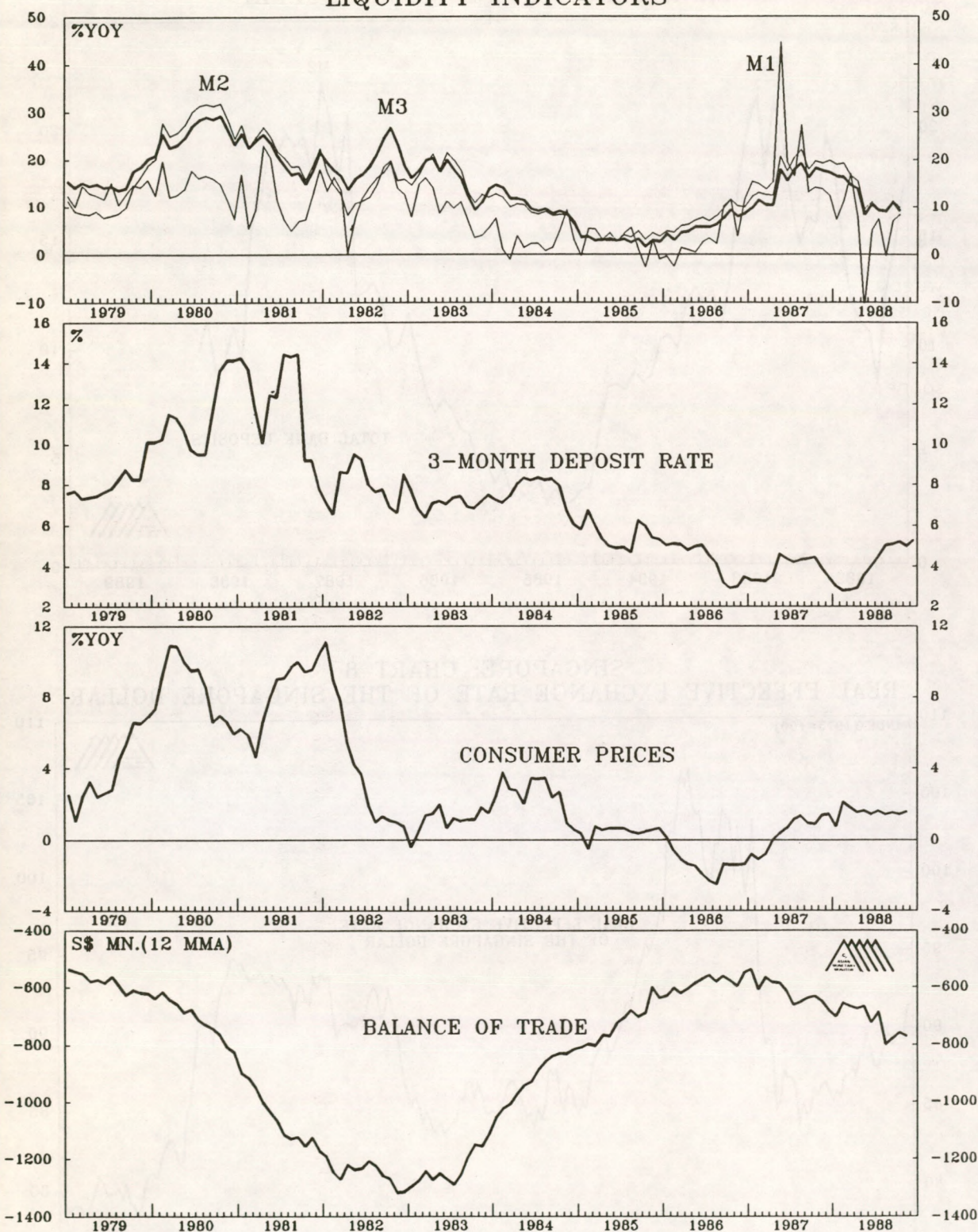
SINGAPORE: CHART 7
BANK DEPOSITS AND MONEY SUPPLY



SINGAPORE: CHART 8
REAL EFFECTIVE EXCHANGE RATE OF THE SINGAPORE DOLLAR



SINGAPORE: CHART 9 LIQUIDITY INDICATORS

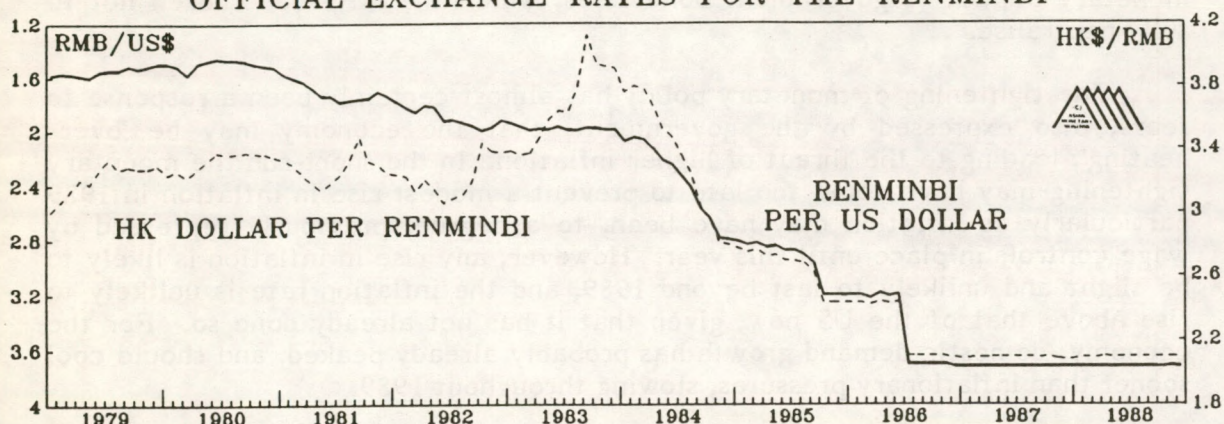


milder than in the other NICs, whereas in fact, the monetary tightening in Singapore has been more severe, implying an overt tightening of monetary policy. This conclusion is supported by an analysis of the sources of the decline in monetary base growth, which shows the key source to have been the negative monetary impact of government bond sales, which the MAS has chosen not to fully neutralise.

The tightening of monetary policy has almost certainly been a response to fears, also expressed by the government, that the economy may be 'over-heating', leading to the threat of higher inflation. In the short-run the monetary tightening may have come too late to prevent a modest rise in inflation in 1989 particularly as inflation may have been, to a degree, previously repressed by wage controls in place until this year. However, any rise in inflation is likely to be slight and unlikely to last beyond 1989, and the inflation rate is unlikely to rise above that of the US now, given that it has not already done so. For the economy, domestic demand growth has probably already peaked, and should cool sooner than inflationary pressures, slowing throughout 1989.

CHINA: THE PENDULUM SWINGS BACK TOWARDS CENTRAL CONTROL

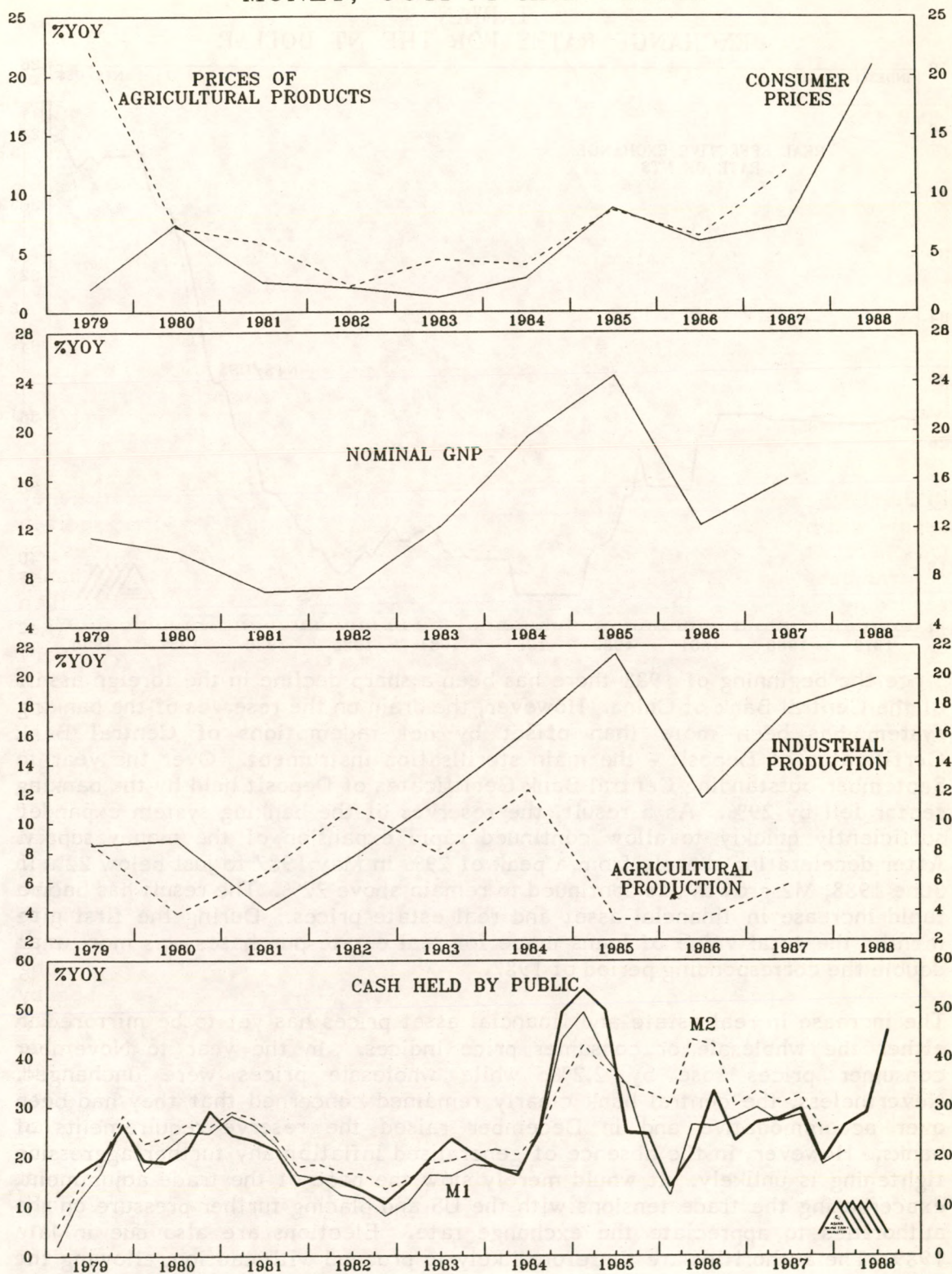
CHINA
OFFICIAL EXCHANGE RATES FOR THE RENMINBI



In January 1988 the People's Bank of China (PBC) announced that "the money supply will be cut drastically". The central bank had started to tighten credit in October 1987 by raising reserve requirements and increasing interest rates for central bank loans. Also in January a series of guidelines was issued to banks regarding priorities to be observed in extending new credits. Chen Muhua, then president of the PBC said the bank would issue only 80% as much money (i.e. currency) in 1988 as it did in 1987. In reality the outcome has been very different. By the end of the first quarter M2 had risen 26% year-on-year, and Li Guixian, appointed president of the PBC in April, reported that the currency volume had expanded by 45.6% by the end of the third quarter.

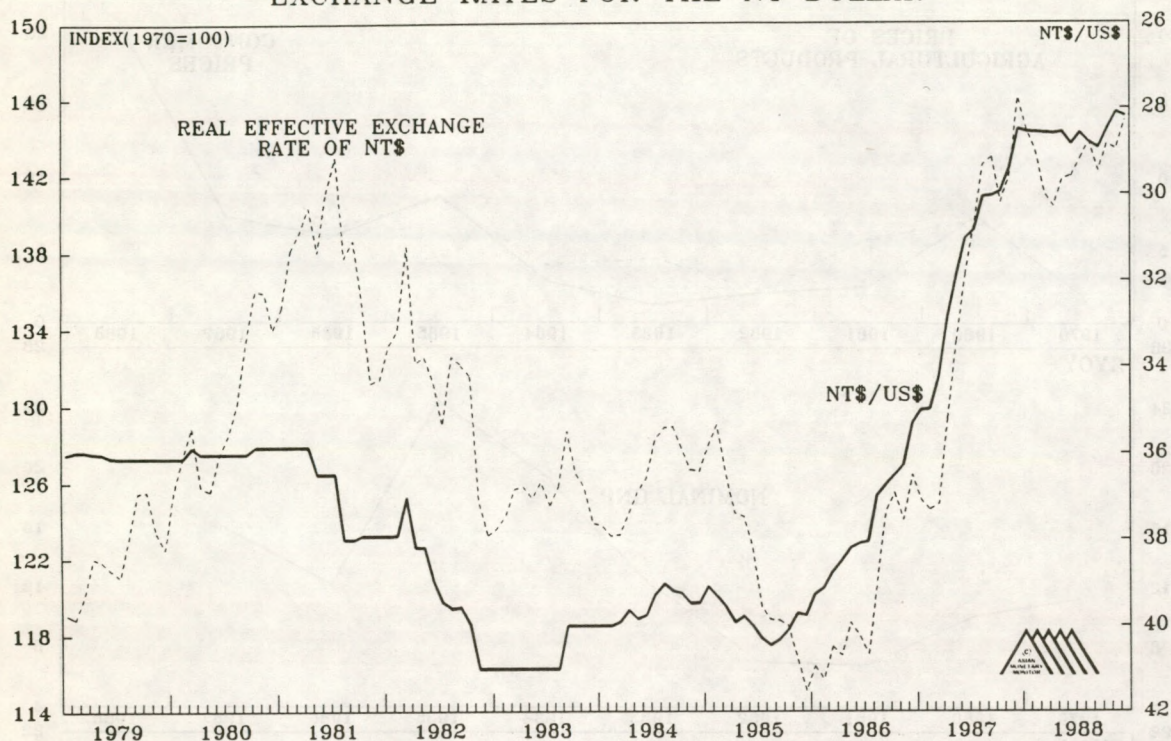
As inflation accelerated through the summer reports surfaced of bankruns as depositors withdrew cash from their accounts, and there was panic-buying of household items from stores by consumers anxious about the potential depreciation in the purchasing power of their savings. Substantial conversion of deposits into currency like this could account for part of the sharp upswing in the currency, though the underlying source of monetary expansion is bank lending to state-owned enterprises and provincial or municipal borrowers who, until November, could not go bankrupt. Not only were deficits of loss-making enterprises being covered, but there was also an explosion of new lending by provincial banks to politically-supported projects. On August 18 the Politburo under General Secretary Zhao Ziyang announced plans to press ahead with price and wage reforms (i.e. further decontrol), but on August 31 the State Council, chaired by Premier Li Peng, announced a plan to curb inflation by limiting state spending, bank credit and money supply growth, and suspending further price reforms in 1988 or 1989 until inflation was curtailed. This announcement stopped the wave of panic buying, and the plan was endorsed by the Communist Party Central Committee on September 10. In early October the State Council ordered cutbacks in a wide range of investment projects to cool the economy further. These cuts became effective as of the December 1st budget allocation. For the time being the pendulum has swung back in favour of central controls and against decentralisation and decontrol.

CHINA MONEY, OUTPUT AND PRICES



TAIWAN: REDUCTION IN CENTRAL BANK STERILISATION SUPPORTS CONTINUED HIGH MONEY GROWTH

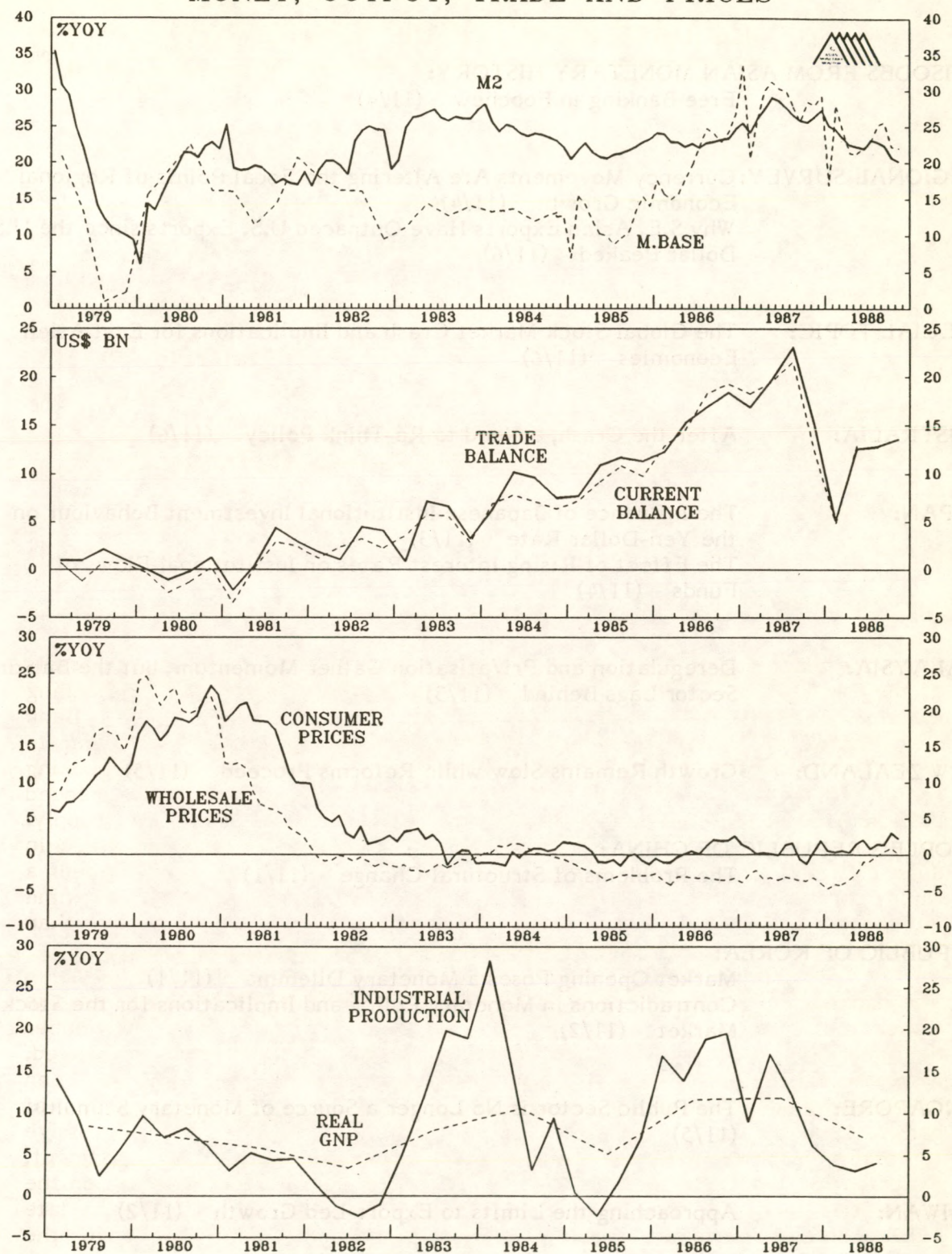
TAIWAN EXCHANGE RATES FOR THE NT DOLLAR



Since the beginning of 1988 there has been a sharp decline in the foreign assets of the Central Bank of China. However, the drain on the reserves of the banking system has been more than offset by net redemptions of Central Bank Certificates of Deposit - the main sterilisation instrument. Over the year to September outstanding Central Bank Certificates of Deposit held by the banking sector fell by 29%. As a result, the reserves of the banking system expanded sufficiently quickly to allow continued rapid expansion of the money supply. After decelerating sharply from a peak of 29% in May 1987 to just below 22% in June 1988, M2 growth has continued to remain above 22%. The result has been a rapid increase in financial asset and real estate prices. During the first nine months the total value of loans made for real estate purchases was more than double the corresponding period of 1987.

The increase in real estate and financial asset prices has yet to be mirrored in either the wholesale or consumer price indices. In the year to November consumer prices rose by 2.2%, while wholesale prices were unchanged. Nevertheless, the central bank clearly remained concerned that they had been over accommodative and in December raised the reserve requirements of banks. However, in the absence of generalised inflation any further aggressive tightening is unlikely. It would merely slow the pace of the trade adjustment, exacerbating the trade tensions with the US and placing further pressure on the authorities to appreciate the exchange rate. Elections are also due in late 1989. The authorities are therefore likely to proceed with caution, allowing the trade adjustment to proceed through higher import growth rather than slower export growth.

TAIWAN MONEY, OUTPUT, TRADE AND PRICES



AN INDEX OF AMM ARTICLES PUBLISHED IN VOLUME 11

EPISODES FROM ASIAN MONETARY HISTORY:

Free Banking in Foochow (11/4)

REGIONAL SURVEY: Currency Movements Are Altering the Focal Points of Regional Economic Growth (11/4)

Why S.E. Asian Exports Have Outpaced U.S. Exports since the U.S. Dollar Peaked (11/6)

SPECIAL TOPIC: The Global Stock Market Crash and Implications for East Asian Economies (11/6)

AUSTRALIA: After the Crash, a Need to Re-Think Policy (11/6)

JAPAN: The Influence of Japanese Institutional Investment Behaviour on the Yen-Dollar Rate (11/3) The Effect of Rising Interest Rates on Institutional Flows of Funds (11/4)

MALAYSIA: Deregulation and Privatisation Gather Momentum, but the Banking Sector Lags Behind (11/3)

NEW ZEALAND: Growth Remains Slow while Reforms Proceed (11/5)

PEOPLE'S REPUBLIC OF CHINA: The Problems of Structural Change (11/1)

REPUBLIC OF KOREA: Market Opening Poses a Monetary Dilemma (11/1) Contradictions in Monetary Policy and Implications for the Stock Market (11/2)

SINGAPORE: The Public Sector is No Longer a Source of Monetary Stimulus (11/5)

TAIWAN: Approaching the Limits to Export-Led Growth (11/2)

THAILAND: After a Change in Monetary Policy, a Shift in Fiscal Policy (11/3)

ECONOMIC CAPSULES:

Australia: A\$ Appreciation May Have Been Overdone (11/2)

Australia: The Yield Curve Turns Positively Sloped (11/4)

Hong Kong: Money Supply Growth and Inflation Increase (11/1)

Hong Kong: The Economy is Booming (11/4)

Hong Kong: Trade Account Deterioration Will Presage Tighter Liquidity (11/5)

Indonesia: Devaluation Increases Non-Oil Exports (11/2)

Japan: Trade Surplus Set to Narrow Significantly (11/1)

Malaysia: Firmer Crude Oil and Palm Oil Prices Improve Growth Prospects (11/1)

New Zealand: High Interest Rates Support the NZ\$ (11/2)

Philippines: Economy Stages a Hesitant Recovery (11/1)

Singapore: A Broadening Economic Expansion (11/4)

Taiwan: The Central Bank is Accommodating a Rise in Loan Demand (11/5)

Taiwan: Tariff Reforms will Speed Trade Adjustment (11/6)

Thailand: Favourable Economic Performance Underpins Buoyant Stockmarket (11/1)

AN INDEX OF AMM ARTICLES PUBLISHED IN VOLUME 12

- BOOK REVIEW: Hong Kong Economic Papers No. 17 (1986) (12/2)
- REGIONAL SURVEY: Completion of the NICs' Adjustment to the Lower Dollar Spells Slower Growth (12/5)
- AUSTRALIA: Tighter Money is Necessary to Restore Better Balance to the Economy (12/5)
- HONG KONG: How to Tighten Up The Linked Rate Mechanism (12/1)
A Free Banking Approach To Reforming Hong Kong's Monetary System (12/1)
Negative Interest Rates - A Comparison Of The Hong Kong and Swiss Schemes (12/1)
Intervention Replaces Arbitrage - The July Package of Monetary Measures (12/4)
Intervention Replaces Arbitrage - The July Package of Monetary Measures: A Comment (12/6)
Response to Dr. Jao (12/6)
The decline of the Hong Kong Dollar in 1983: Devaluation or Depreciation? (12/6)
- JAPAN: Fiscal Policy On An Expansionary Tack (12/1)
Prospects for a More Rapid Trade Adjustment (12/3)
The Impact of Rising Interest Rates and Financial Deregulation on the Equity Market (12/4)
- PEOPLE'S REPUBLIC OF CHINA: China Emerges as an Important Pacific Trading Partner (12/2)
- SINGAPORE: A Deliberate Tightening of Monetary Policy (12/6)
- TAIWAN: A Contracting Trade Surplus Should Permit the Central Bank to Reduce Monetary Growth (12/3)

ECONOMIC CAPSULES:

Australia: Bond Yields Tumble, but Monetary Policy Could Tighten (12/2)

China: The Pendulum Swings Back Towards Central Control (12/6)

Hong Kong: As the Economy Turns, Liquidity Conditions Tighten (12/2)

Hong Kong: Rising Interest Rates Reflect Tightening Liquidity Conditions (12/3)

Japan: Private Capital Outflows Wane, Even as Trade Surplus Rises (12/2)

Japan: The Widening of the Trade Surplus is Temporary (12/5)

Malaysia: Commodity Prices Improve, But Loan Demand Remains Weak (12/1)

Malaysia: As Commodity Prices Rise, Growth Accelerates (12/4)

New Zealand: The Monetary Tightening is Paying Off (12/5)

Philippines: Exchange Rate Will Depreciate More Quickly (12/2)

South Korea: Inflation Is Becoming A Worry (12/1)

South Korea: A Lack of a Credible Anti-Inflation Strategy (12/2)

South Korea: The Central Bank Steps Up the Pace of Monetary Sterilisation (12/4)

Taiwan: Reduction in Central Bank sterilisation supports continued high money growth (12/6)

Thailand: Another Year Of Strong Economic Growth (12/1)

Thailand: As Growth Accelerates Bottlenecks Begin to Emerge (12/2)

Thailand: Trade Deficit Widens, but Inflation Is the Bigger Problem (12/3)

